

**DELTRIN 300TE BK602**

Delrin USA, LLC - Acetal (POM) Homopolymer

**General Information**
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Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Impact Modifier	• Mold Release	
Features	• Good Mold Release	• Impact Modified	• Medium-high Viscosity
	• Homopolymer	• Low VOC	
Uses	• Automotive Applications		
RoHS Compliance	• Contact Manufacturer		
Part Marking Code (ISO 11469)	• >POM-I<		
Resin ID (ISO 1043)	• POM-I		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.37	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	6.0	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.5	%	
Flow	1.3	%	
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	290000	psi	ISO 527-1
Tensile Stress (Yield)	7830	psi	ISO 527-2
Tensile Strain (Yield)	20	%	ISO 527-2
Nominal Tensile Strain at Break	35	%	ISO 527-2
Flexural Modulus	290000	psi	ISO 178
Flexural Stress (3.5% Strain)	7980	psi	ISO 178
Poisson's Ratio	0.40		
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in <sup>2</sup>	
73°F	7.1	ft·lb/in <sup>2</sup>	
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness			ISO 2039-2
M-Scale	69		
R-Scale	116		
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	277	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	172	°F	ISO 75-2/A
Vicat Softening Temperature	342	°F	ISO 306/A50
CLTE - Flow	6.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.7E-5	in/in/°F	ISO 11359-2
Annealing Temperature	320	°F	
Annealing Time - Optional	30.0	min/mm	
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate <sup>2</sup> (0.0787 in)	1.8	in/min	ISO 3795
FMVSS Flammability	B		FMVSS 302
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>



Melt Density	1.15 g/cm <sup>3</sup>	
<b>Additional Information</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Emission	< 2 ppm	VDA 275
<b>Processing Information</b>		
<b>Injection</b>	<b>Nominal Value Unit</b>	
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	
<b>Extrusion</b>	<b>Nominal Value Unit</b>	
Drying Temperature	167 to 185 °F	
Drying Time	2.0 to 4.0 hr	
Suggested Max Moisture	< 0.050 %	
Melt Temperature	383 to 401 °F	
Extrusion Melt Temperature, Optimum	392 °F	

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> FMVSS 302

