

**DELTRIN 100KM NC000**

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
Filler / Reinforcement	• Kevlar Fiber
Additive	• Mold Release
Features	• Good Mold Release • Homopolymer • High Viscosity • Wear Resistant
RoHS Compliance	• Contact Manufacturer
Automotive Specifications	• GM GMW15702-130004
Part Marking Code (ISO 11469)	• >POM-AG10<
Resin ID (ISO 1043)	• POM-AG10

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

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	1.7	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.5	%	
Flow	1.8	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	450000	psi	ISO 527-1
Tensile Stress (Break)	9430	psi	ISO 527-2
Tensile Strain (Break)	15	%	ISO 527-2
Flexural Modulus	435000	psi	ISO 178
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.7	ft·lb/in <sup>2</sup>	
73°F	2.1	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft·lb/in <sup>2</sup>	
73°F	24	ft·lb/in <sup>2</sup>	
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)	208	°F	ISO 75-2/A
Melting Temperature <sup>2</sup>	352	°F	ISO 11357-3
CLTE - Flow			ISO 11359-2
--	6.1E-5	in/in/°F	
-40 to 73°F	5.2E-5	in/in/°F	
CLTE - Transverse			ISO 11359-2
--	5.6E-5	in/in/°F	
-40 to 73°F	5.1E-5	in/in/°F	
Annealing Temperature	320	°F	
Annealing Time - Optional	30.0	min/mm	
Flammability	Nominal Value	Unit	Test Method



Burning Rate <sup>3</sup> (0.0394 in)	1.3 in/min	ISO 3795
FMVSS Flammability	B	FMVSS 302
<b>Fill Analysis</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Melt Density	1.18 g/cm <sup>3</sup>	

### Processing Information

<b>Injection</b>	<b>Nominal Value Unit</b>
Drying Temperature	176 °F
Drying Time - Desiccant Dryer	2.0 to 4.0 hr
Suggested Max Moisture	< 0.20 %
Processing (Melt) Temp	410 to 428 °F
Melt Temperature, Optimum	419 °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
<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	< 0.20 %
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> 10°C/min

<sup>3</sup> FMVSS 302

