

**DELTRIN 327UVE NC010**

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	• Mold Release • UV Stabilizer
Features	• Good Mold Release • Low VOC • UV Stabilized • Homopolymer • Medium-high Viscosity
Uses	• Automotive Applications
RoHS Compliance	• Contact Manufacturer
Part Marking Code (ISO 11469)	• >POM<
Resin ID (ISO 1043)	• POM

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

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	6.0	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.9	%	
Flow	2.2	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	435000	psi	ISO 527-1
Tensile Stress (Yield)	10300	psi	ISO 527-2
Tensile Strain (Yield)	20	%	ISO 527-2
Nominal Tensile Strain at Break	40	%	ISO 527-2
Flexural Modulus	435000	psi	ISO 178
Flexural Stress (3.5% Strain)	11900	psi	ISO 178
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in <sup>2</sup>	
73°F	4.8	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	140	ft·lb/in <sup>2</sup>	
73°F	170	ft·lb/in <sup>2</sup>	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ISO 2039-2
M-Scale	92		
R-Scale	121		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	329	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	196	°F	ISO 75-2/A
Vicat Softening Temperature	347	°F	ISO 306/A50
Melting Temperature <sup>2</sup>	352	°F	ISO 11357-3
CLTE - Flow	6.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.1E-5	in/in/°F	ISO 11359-2
Annealing Temperature	320	°F	



Annealing Time - Optional	30.0	min/mm	
Specific Heat Capacity	0.280	Btu/lb/°F	
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate <sup>3</sup> (0.0394 in)	2.5	in/min	ISO 3795
FMVSS Flammability	B		FMVSS 302
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Specific Heat Capacity of Melt	0.468	Btu/lb/°F	
<b>Additional Information</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Emission	< 2	ppm	VDA 275

### Processing Information

	Nominal Value	Unit
<b>Injection</b>		
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	11600 to 14500	psi
Drying Recommended	yes	
Hold Pressure Time	8.00	s/mm
Maximum Screw Tangential Speed	472	in/min

### 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

