DELRIN 100ALE NC010

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	• Lubricant		
Features	• Good Mold Release • High Viscosity • Homopolymer	• Low Friction • Low VOC • Lubricated	• Noise Damping • Wear Resistant
Uses	• Automotive Applications		
RoHS Compliance	• Contact Manufacturer		
Part Marking Code (ISO 11469)	• >POM-S<		
Resin ID (ISO 1043)	• POM-S		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.5	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	2.0	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	435000	psi	ISO 527-1
Tensile Stress (Yield)	10200	psi	ISO 527-2
Tensile Strain (Yield)	18	%	ISO 527-2
Nominal Tensile Strain at Break	40	%	ISO 527-2
Poisson's Ratio	0.37		
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in²	
73°F	5.0	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	95	ft·lb/in²	
73°F	No Break		
Notched Izod Impact Strength (73°F)	3.8	ft·lb/in²	ISO 180/1A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature [2]	352	°F	ISO 11357-3
Annealing Temperature	320	°F	
Annealing Time - Optional	30.0	min/mm	
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Rate [3] (0.0787 in)	0.91	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

Additional Information	Nominal Value	Unit	Test Method
Emission	< 2	ppm	VDA 275

Processing Information

Injection	Nominal Value	Unit
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	13100 to 16000	psi
Drying Recommended	yes	
Hold Pressure Time	8.00	s/mm
Maximum Screw Tangential Speed	472	in/min

Extrusion	Nominal Value	Unit
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

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

[2] 10°C/min

[3] FMVSS 302