

DELTRIN RASC698 NC010

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Additive	• Lubricant
Features	• Good Surface Finish • Low Friction • Renewable Resource Content • Homopolymer • Low Viscosity • Low Emissions • Lubricated • Wear Resistant
Uses	• Thin-walled Parts
RoHS Compliance	• Contact Manufacturer
Part Marking Code (ISO 11469)	• >POM<
Resin ID (ISO 1043)	• POM

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.44	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	21	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	1.6	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	450000	psi	ISO 527-1
Tensile Stress (Yield)	9430	psi	ISO 527-2
Tensile Strain (Yield)	11	%	ISO 527-2
Nominal Tensile Strain at Break	20	%	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	1.9	ft·lb/in ²	
73°F	1.9	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	71	ft·lb/in ²	
73°F	71	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	207	°F	ISO 75-2/A
Melting Temperature ²	352	°F	ISO 11357-3
CLTE - Flow	6.7E-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	
Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	1.14	g/cm ³	
Ejection Temperature	230	°F	
Specific Heat Capacity of Melt	0.722	Btu/lb/°F	
Thermal Conductivity of Melt	1.5	Btu·in/hr/ft ² /°F	ISO 22007-2

Additional Information

Nominal Value Unit

Test Method



Emission	< 8 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		< 0.050 %
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		11600 to 14500 psi
Drying Recommended		yes
Hold Pressure Time		8.00 s/mm

Notes

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

² 10°C/min

