

DELTRIN FG100TL 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	• Mold Release		
		• PTFE Micropowder Lubricant: 2%	
Features	• Good Mold Release	• Low Friction	• Wear Resistant
	• Homopolymer	• Lubricated	
RoHS Compliance	• Contact Manufacturer		
Part Marking Code (ISO 11469)	• >POM<		
Resin ID (ISO 1043)	• POM		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.43	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.4	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	1.8	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	435000	psi	ISO 527-1
Tensile Stress (Yield)	10300	psi	ISO 527-2
Tensile Strain (Yield)	25	%	ISO 527-2
Nominal Tensile Strain at Break	30	%	ISO 527-2
Flexural Modulus	406000	psi	ISO 178
Poisson's Ratio	0.37		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in ²	
73°F	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	110	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	316	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	203	°F	ISO 75-2/A
Melting Temperature ²	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
Flammability	Nominal Value	Unit	Test Method
Burning Rate ³ (0.0394 in)	1.7	in/min	ISO 3795
FMVSS Flammability	B		FMVSS 302

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	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
Extrusion	Nominal Value Unit
Drying Temperature	176 °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

