

DELTRIN FG150 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
Features	• Good Mold Release • High Viscosity • Good Thermal Stability • Homopolymer
RoHS Compliance	• Contact Manufacturer
Part Marking Code (ISO 11469)	• >POM<
Resin ID (ISO 1043)	• POM

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.3	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	1.9	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	1.8	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	464000	psi	ISO 527-1
Tensile Stress (Yield)	10600	psi	ISO 527-2
Tensile Strain (Yield)	22	%	ISO 527-2
Nominal Tensile Strain at Break	40	%	ISO 527-2
Flexural Modulus	421000	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 ²	
73°F	5.0	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	4.8	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ISO 2039-2
M-Scale	94		
R-Scale	122		
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)	210	°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	5.6E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.06 in	122	°F	
0.12 in	122	°F	
RTI Imp			UL 746B
0.06 in	122	°F	
0.12 in	122	°F	



RTI Str		UL 746B
0.06 in	122 °F	
0.12 in	122 °F	
Annealing Temperature	320 °F	
Annealing Time - Optional	30.0 min/mm	
Flammability	Nominal Value Unit	Test Method
Burning Rate ³ (0.0394 in)	1.3 in/min	ISO 3795
Flame Rating (0.06 in)	HB	UL 94
Flammability Classification (0.06 in)	HB	IEC 60695-11-10, -20

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

