

DELTRIN 100AF

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information

General	
Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe Latin America North America
Filler / Reinforcement	<ul style="list-style-type: none"> PTFE Fiber, 20% Filler by Weight
Additive	<ul style="list-style-type: none"> Mold Release
Features	<ul style="list-style-type: none"> Good Mold Release High Viscosity Homopolymer Low Friction Wear Resistant
RoHS Compliance	<ul style="list-style-type: none"> Contact Manufacturer
Automotive Specifications	<ul style="list-style-type: none"> ASTM D4181 POM110 L20 A21220 ASTM D4181 POM110 L20 B33230 ASTM D6778 POM0110 DSM 61038 GM GMP.POM.014 STELLANTIS MS-DB-100 CPN1604 Color: Non-matched Color STELLANTIS MS-DB-428 CPN3073 Color: Black
Part Marking Code (ISO 11469)	<ul style="list-style-type: none"> >POM-SF20<
Resin ID (ISO 1043)	<ul style="list-style-type: none"> POM-SF20

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.54	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.90	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.5	%	
Flow	2.1	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392000	psi	ISO 527-1
Tensile Stress (Break)	7690	psi	ISO 527-2
Tensile Strain (Break)	15	%	ISO 527-2
Flexural Modulus	363000	psi	ISO 178
Poisson's Ratio	0.38		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	33	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength (73°F)	2.4	ft·lb/in ²	ISO 180/1A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	189	°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
RTI Elec			UL 746B
0.06 in	221	°F	
0.12 in	221	°F	
RTI Imp			UL 746B
0.06 in	185	°F	
0.12 in	185	°F	
RTI Str			UL 746B



0.06 in	194 °F
0.12 in	194 °F
Annealing Temperature	320 °F
Annealing Time - Optional	30.0 min/mm
Flammability	Nominal Value Unit Test Method
Burning Rate ³ (0.0394 in)	> 1.6 in/min ISO 3795
Flame Rating	UL 94
0.06 in	HB
0.12 in	HB
Flammability Classification	IEC 60695-11-10, -20
0.06 in	HB
0.12 in	HB
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	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

