

DELTRIN 300ATB BK000

Delrin USA, LLC - Acetal (POM) Homopolymer

General Information
General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Filler
Additive	• Impact Modifier
Features	• Antistatic • Impact Modified • Homopolymer • Medium Viscosity
RoHS Compliance	• Contact Manufacturer
Automotive Specifications	• GM QK 005311 PZ
Part Marking Code (ISO 11469)	• >POM-ICD<
Resin ID (ISO 1043)	• POM-ICD

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.5	%	
Flow	1.7	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	363000	psi	ISO 527-1
Tensile Stress (Break)	7400	psi	ISO 527-2
Tensile Strain (Break)	18	%	ISO 527-2
Poisson's Ratio	0.38		
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in ²	
73°F	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	57	ft·lb/in ²	
73°F	81	ft·lb/in ²	
Notched Izod Impact Strength ² (73°F)	5.2	ft·lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	75		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	275	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	158	°F	ISO 75-2/A
Glass Transition Temperature ³	-94.0	°F	ISO 11357-2
Melting Temperature ³	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
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+4	ohms	ASTM D4496
Volume Resistivity	1.0E+5	ohms·cm	ASTM D4496
Flammability	Nominal Value	Unit	Test Method
Burning Rate ⁴ (0.0394 in)	0.98	in/min	ISO 3795



FMVSS Flammability	B	FMVSS 302
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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	392 to 410	°F
Melt Temperature, Optimum	401	°F
Mold Temperature	104 to 140	°F
Mold Temperature, Optimum	122	°F
Holding Pressure	8700 to 11600	psi
Drying Recommended	yes	
Hold Pressure Time	7.50	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	< 0.050	%
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 Assessed

³ 10°C/min

⁴ FMVSS 302

