



Hostaform® C 9021 GV1/40

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

POM copolymer

Injection molding type, reinforced with ca 40 % glass fibers; high resistance to thermal and oxidative degradation; reduced thermal expansion and shrinkage.

UL-registration in natural and a thickness more than 0.81 mm as UL 94 HB, temperature index UL 746 B for a thickness of 2 mm, electrical 105 °C, mechanical 95 °C.

Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm.

Ranges of applications: for molded parts with very high rigidity, similar properties like HOSTAFORM C 9021 GV1/30.

FMVSS = Federal Motor Vehicle Safety Standard (USA)

UL = Underwriters Laboratories (USA)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Copolymer	• High Heat Resistance	• High Stiffness
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• POM		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.72	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	2.50	cm ³ /10min	ISO 1133
Water Absorption (Saturation, 73°F)	0.90	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.89E+6	psi	ISO 527-2/1A/1
Tensile Stress (Break)	20300	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.0	%	ISO 527-2/1A/5
Tensile Creep Modulus (1 hr)	1.60E+6	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	1.03E+6	psi	ISO 899-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in ²	
73°F	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	12	ft·lb/in ²	
73°F	9.5	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	322	°F	ISO 75-2/A
Heat Deflection Temperature (1160 psi, Unannealed)	277	°F	ISO 75-2/C

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Thermal	Nominal Value	Unit	Test Method
Melting Temperature ²	331	°F	ISO 11357-3
CLTE - Flow	1.1E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+14	ohms·cm	IEC 60093
Electric Strength	1000	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.50		
1 MHz	4.50		
Dissipation Factor			IEC 60250
100 Hz	3.0E-3		
1 MHz	6.0E-3		
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.03 in	HB		
0.06 in	HB		
Additional Information	Nominal Value	Unit	Test Method
ISO Type	POM-K, M-GNR, 01-003, GF40		ISO 9988-1

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Hopper Temperature	68 to 73	°F
Rear Temperature	338 to 356	°F
Middle Temperature	356 to 374	°F
Front Temperature	374 to 392	°F
Nozzle Temperature	374 to 410	°F
Processing (Melt) Temp	374 to 410	°F
Mold Temperature	176 to 248	°F
Injection Pressure	8700 to 17400	psi
Injection Rate	Slow	
Holding Pressure	8700 to 17400	psi
Back Pressure	0.00 to 290	psi

Injection Notes

Feed Temperature: 60 to 80°C
Zone 4 Temperature: 190 to 210°C
Manifold Temperature: 190 to 210°C

Notes

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

² 10°C/min