



Hostaform® C 9021 S1

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

POM copolymer Standard-Injection molding type with high rigidity, hardness and toughness; good chemical resistance. Modified with 1% silicon oil Available in natural and colored Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 Burning rate ISO 3795 and FMVSS 302 < 100mm/min for a thickness more than 1 mm. Ranges of applications: precision engineering, electric and electronical industry, domestic appliances. FDA = Food and Drug Administration (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Silicone Oil: 1%		
Features	• Chemical Resistant • High Hardness	• High Stiffness • High Toughness	
Uses	• Appliances	• Electrical/Electronic Applications	• Engineered Applications
Agency Ratings	• EU 10/2011	• FDA 21 CFR 177.2470	
RoHS Compliance	• Contact Manufacturer		
Appearance	• Colors Available	• Natural Color	
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.10	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	2.0	%	
Water Absorption (Saturation, 73°F)	0.65	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392000	psi	ISO 527-2/1A
Tensile Stress (Yield)	8700	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	12	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	35	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in ²	
73°F	3.1	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	76	ft·lb/in ²	
73°F, Partial Break	86	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Melting Temperature ²	331	°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
Effective Thermal Diffusivity	4.85E-8	m ² /s	Internal Method

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Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	1.20	g/cm ³	Internal Method
Melt Thermal Conductivity	1.1	Btu·in/hr/ft ² /°F	Internal Method
Ejection Temperature	284	°F	
Specific Heat Capacity of Melt	0.528	Btu/lb/°F	

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 86	°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 Rate	Slow-Moderate	
Back Pressure	< 580	psi

Injection Notes

Feeding zone temperature: 60 to 80°C
 Zone4 temperature: 190 to 210°C
 Hot runner temperature: 190 to 210°C

Notes

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

² 10°C/min