



# Hostaform® C 27021 XAP

Celanese Corporation - Acetal (POM) Copolymer

Sunday, July 23, 2017

## General Information

### Product Description

POM copolymer

Very easy flowing Injection molding type with high rigidity and hardness; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation.

Emission according to VDA 275 < 10 mg/kg

Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm.

Monomers and additives are listed in EU-Regulation (EU) 10/2011

FDA compliant according to 21 CFR 177.2470

FDA = Food and Drug Administration (USA)

### General

Material Status	• Commercial: Active	
Availability	• Europe	• North America
Uses	• Automotive Applications	• Automotive Interior Parts
Agency Ratings	• EU 10/2011	• FDA 21 CFR 177.2470
RoHS Compliance	• Contact Manufacturer	
Processing Method	• Injection Molding	

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	1.46	in <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	1.9	%	
Water Absorption (Saturation, 73°F)	0.65	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	421000	psi	ISO 527-2/1A/1
Tensile Stress (Yield)	9430	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	7.5	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	17	%	ISO 527-2/1A/50
Tensile Creep Modulus (1 hr)	363000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	189000	psi	ISO 899-1
Flexural Modulus (73°F)	406000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.6	ft-lb/in <sup>2</sup>	
73°F	2.6	ft-lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	81	ft-lb/in <sup>2</sup>	
73°F	81	ft-lb/in <sup>2</sup>	

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Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	223	°F	ISO 75-2/A
Melting Temperature <sup>2</sup>	331	°F	ISO 11357-3
CLTE - Flow	6.1E-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	890	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.00		
1 MHz	4.00		
Dissipation Factor			IEC 60250
100 Hz	2.5E-3		
1 MHz	5.0E-3		
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	HB		
0.12 in	HB		
Fill Analysis	Nominal Value	Unit	
Melt Density	1.20	g/cm <sup>3</sup>	
Melt Specific Heat	0.528	Btu/lb/°F	
Melt Thermal Conductivity	1.1	Btu-in/hr/ft <sup>2</sup> /°F	
Ejection Temperature	284	°F	

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 284	°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 Pressure	8700 to 17400	psi
Injection Rate	Slow-Moderate	
Holding Pressure	8700 to 17400	psi
Back Pressure	0.00 to 580	psi

#### Injection Notes

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

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 10°C/min