



Hostaform® M10AE

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

POM copolymer Stiff-flowing type with high melt strength; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. 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 < 100 mm/min for a thickness more than 1 mm.

Ranges of applications: For extrusion blow molding, and for injection molding thick-walled, void-free molded parts.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Alkali Resistant • Chemical Resistant	• Fuel Resistant • High Melt Strength	• Hydrolysis Resistant • Solvent Resistant
Uses	• Blow Molding Applications	• Thick-walled Parts	
Agency Ratings	• EU 10/2011	• FDA 21 CFR 177.2470	
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Extrusion Blow Molding	• Injection Molding	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	0.900	cm ³ /10min	ISO 1133
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	406000	psi	ISO 527-2/1A
Tensile Stress (Yield)	9430	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	9.0	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	25	%	ISO 527-2/1A/50
Tensile Creep Modulus (1 hr)	348000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	174000	psi	ISO 899-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in ²	
73°F	4.8	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	95	ft·lb/in ²	
73°F, Partial Break	100	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	207	°F	ISO 75-2/A
Vicat Softening Temperature	302	°F	ISO 306/B50
Melting Temperature ²	333	°F	ISO 11357-3
CLTE - Flow	7.2E-5	in/in/°F	ISO 11359-2

Hostaform® M10AE

Celanese Corporation - Acetal (POM) Copolymer

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	710	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.00		
1 MHz	4.00		
Dissipation Factor			IEC 60250
100 Hz	2.0E-3		
1 MHz	5.0E-3		
Comparative Tracking Index	600	V	IEC 60112

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