Hostaform® C13031 XF

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Hostaform® acetal copolymer grade C13031 XF is an acetal copolymer modified to resist deterioration from aggressive fuel blends. This material is specially targeted for transportation industry fuel systems. In natural form, Hostaform® C13031 XF has a distinctive yellow color (Color code 50/5339) to denote use for fuel systems. Additionally the product is available in black 10/9022 for laser welding applications.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Fuel Resistant	• Laser Weldable	
Uses	• Automotive Applications		
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black	• Yellow	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	12	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.9	%	
Flow	2.2	%	
Water Absorption (Equilibrium, 73°F, 50% RH)	0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	413000	psi	ISO 527-2/1A
Tensile Stress (Yield)	8990	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	11	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	30	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	421000	psi	ISO 178
Flexural Stress (3.5% Strain)	11000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in²	
73°F	3.6	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	67	ft·lb/in²	
73°F	71	ft·lb/in²	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	88		ISO 2039-2
Ball Indentation Hardness [2]	19900	psi	ISO 2039-1
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (66 psi, Unannealed)	318	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	216	°F	ISO 75-2/A
Melting Temperature [3]	338	°F	ISO 11357-3
CLTE - Flow	5.0E-5	in/in/°F	ISO 11359-2

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Thermal	Nominal Value	Unit	Test Method
CLTE - Transverse	5.0E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	3.0 to 4.0	hr
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] 30s

[3] 10°C/min