Hostaform® C 27021 XAP² ™

Celanese Corporation - Acetal (POM) Copolymer

Saturday, November 2, 2019

General Information

Product Description

Polyacetalcopolymer Easy flow injection molding grade with reduced emissions especially for automotive interior application. Burning rate according to FMVSS 302 < 100 mm/min (1 mm thickness) Emission according to VDA 275 < 2 mg/kg (natural grades) Emission according to VDA 275 < 5 mg/kg (colored grades) Preliminary Datasheet

General			
Material Status	• Experimental: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Flow	• Low Emissions	
Uses	• Automotive Applications	• Automotive Interior Parts	
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	24	cm³/10min	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	399000	psi	ISO 527-2/1A
Tensile Stress (Yield)	9280	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)	348000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	174000	psi	ISO 899-1
Flexural Modulus (73°F)	377000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.6	ft·lb/in²	
73°F	2.6	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	81	ft·lb/in²	
73°F	81	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature [2]	327	°F	ISO 11357-3
CLTE - Flow	6.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	6.7E-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

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Electrical	Nominal Value	Unit	Test Method
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 347	°F
Middle Temperature	356 to 365	°F
Front Temperature	356 to 383	°F
Nozzle Temperature	374 to 392	°F
Processing (Melt) Temp	356 to 392	°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: 180 to 200°C

Hot runner temperature: 190 to 200°C

Notes

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

[2] 10°C/min