

Hostaform® C 52021

Acetal (POM) Copolymer

Celanese Corporation

Message:

Chemical abbreviation according to ISO 1043-1: POM

Molding compound ISO 9988- POM-K, M-GNR, 06-002

POM copolymer

Extremely easy flowing Injection molding type for very thin-walled precision molded parts with unfavourable flow-path-wallthickness relation; permits processing at reduced temperature and also shorter cycle times; for mechanical lower requirements; 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

UL-registration in natural a thickness more than 0.81 mm, in black a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B for a thickness of 1.5 mm, electrical 105°C, mechanical 90°C

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

Ranges of applications: For very thin-walled precision molded parts with unfavourable flow-path-wallthickness relation; permits processing at reduced temperature and also shorter cycle times.

FDA = Food and Drug Administration (USA)

FMVSS = Federal Motor Vehicle Safety Standard (USA)

UL = Underwriters Laboratories (USA)

General Information		
UL YellowCard	E42337-234606	E42337-609721
Features	Solvent resistance	
	Fast molding cycle	
	High liquidity	
	Good chemical resistance	
	alkali resistance	
	Fuel resistance	
	Hydrolysis resistance	
Uses	Thin wall parts	
Agency Ratings	FDA 21 CFR 177.2470	
	Europe 10/1/2011 12:00:00 AM	
RoHS Compliance	Contact manufacturer	
Processing Method	Injection molding	
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)	
	Shear Modulus vs. Temperature (ISO 11403-1)	
	Shear Stress vs. Shear Rate (ISO 11403-1)	

Resin ID (ISO 1043)	POM		
Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	39.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Vertical flow direction	1.8	%	ISO 294-4
Flow direction	1.9	%	ISO 294-4
Water Absorption (Saturation, 23°C)	0.65	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3000	MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	65.0	MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	7.0	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	15	%	ISO 527-2/1A/50
Tensile Creep Modulus			ISO 899-1
1 hr	2500	MPa	ISO 899-1
1000 hr	1300	MPa	ISO 899-1
Flexural Modulus (23°C)	2800	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	5.0	kJ/m ²	ISO 179/1eA
23°C	5.0	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	100	kJ/m ²	ISO 179/1eU
23°C	100	kJ/m ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	106	°C	ISO 75-2/A
Melting Temperature ¹	166	°C	ISO 11357-3
CLTE - Flow	1.1E-4	cm/cm/°C	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
Dielectric Strength	35	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	4.00		IEC 60250
1 MHz	4.00		IEC 60250
Dissipation Factor			IEC 60250
100 Hz	3.0E-3		IEC 60250
1 MHz	5.0E-3		IEC 60250
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method

Flame Rating			UL 94
0.810 mm	HB		UL 94
1.50 mm	HB		UL 94
Fill Analysis	Nominal Value	Unit	Test Method
Density of Melt	1.200	g/cm ³	Internal method
Ejection Temperature	163	°C	Internal method
Specific Heat Capacity of Melt	2060	J/kg/°C	Internal method
Thermal Conductivity of Melt	0.19	W/m/K	Internal method
Injection	Nominal Value	Unit	
Drying Temperature	120 - 140	°C	
Drying Time	3.0 - 4.0	hr	
Suggested Max Moisture	0.15	%	
Hopper Temperature	20.0 - 30.0	°C	
Rear Temperature	170 - 180	°C	
Middle Temperature	180 - 190	°C	
Front Temperature	190 - 200	°C	
Nozzle Temperature	190 - 210	°C	
Processing (Melt) Temp	190 - 210	°C	
Mold Temperature	80.0 - 120	°C	
Injection Pressure	60.0 - 120	MPa	
Injection Rate	Slow-Moderate		
Holding Pressure	60.0 - 120	MPa	
Back Pressure	0.00 - 4.00	MPa	
Injection instructions			
Manifold Temperature: 190 to 210°CZone 4 Temperature: 190 to 210°CFeed Temperature: 60 to 80°C			
NOTE			
1.	10°C/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

