Acetal (POM) Copolymer

Ticona



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Technical Data

Product Description

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 9988- POM-K, M-GNS, 03-002

POM copolymer

Injection molding type like C 9021, with special additive modified; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation; good wear properties and low coefficient of friction.

UL-registration in natural and black and a thickness more than 1.5 mm as UL 94 HB.

Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm.

Ranges of applications: sliding parts for window lifter.

UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

General			
Material Status	Commercial: Active		
Literature ¹	Technical Datasheet - ISO (English)		
UL Yellow Card ²	• E42337-234611		
Search for UL Yellow Card	TiconaHostaform®		
Availability	 Africa & Middle East 	 Asia Pacific 	Europe
Additive	 Unspecified Additive 		
Features	 Alkali Resistant Fuel Resistant Good Chemical Resistance	Good Wear ResistanceHydrolysis ResistantLow Friction	Solvent Resistant
RoHS Compliance	 Contact Manufacturer 		
Processing Method	 Injection Molding 		
Multi-Point Data	 Isothermal Stress vs. Strain (ISO 11403-1) 		
Resin ID (ISO 1043)	• POM		

Physical	Nominal Value Unit	Test Method
Density	1.38 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.00 cm ³ /10min	ISO 1133
Molding Shrinkage		ISO 294-4
Across Flow	1.9 %	
Flow	2.1 %	
Water Absorption (Saturation, 23°C)	0.65 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2600 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	58.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	8.0 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	20 %	ISO 527-2/1A/50
Tensile Creep Modulus		ISO 899-1
1 hr	2300 MPa	
1000 hr	1200 MPa	

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Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	5.0 kJ/m ²	
23°C	6.0 kJ/m ²	
Charpy Unnotched Impact Strength		ISO 179/1eU
-30°C	130 kJ/m ²	
23°C	150 kJ/m ²	
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		ISO 75-2/A
1.8 MPa, Unannealed	88.0 °C	
Melting Temperature ⁴	166 °C	ISO 11357-3
CLTE - Flow	0.00011 cm/cm/°C	ISO 11359-2
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+14 ohm	IEC 60093
Volume Resistivity	1.0E+14 ohm · cm	IEC 60093
Electric Strength	35 kV/mm	IEC 60243-1
Relative Permittivity		IEC 60250
100 Hz	3.80	
1 MHz	3.80	
Dissipation Factor		IEC 60250
100 Hz	0.0020	
1 MHz	0.0050	
Comparative Tracking Index	600 V	IEC 60112
Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.50 mm	HB	
3.00 mm	HB	

Injection	Nominal Value Unit	
Drying Temperature	100 to 120 °C	
Drying Time	3.0 to 4.0 hr	
Suggested Max Moisture	0.15 %	
Hopper Temperature	20.0 to 30.0 °C	
Rear Temperature	170 to 180 °C	
Middle Temperature	180 to 190 °C	
Front Temperature	190 to 200 °C	
Nozzle Temperature	190 to 210 °C	
Processing (Melt) Temp	190 to 210 °C	
Mold Temperature	80.0 to 120 °C	
Injection Pressure	60.0 to 120 MPa	
Injection Rate	Slow	
Holding Pressure	60.0 to 120 MPa	
Back Pressure	0.00 to 2.00 MPa	
Injection Notes		

Injection Notes

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

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Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 10°C/min

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Where to Buy

Supplier

Ticona Florence, KY USA Telephone: 800-833-4882 Web: http://www.ticona.com/

Distributor

RESINEX Group RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country. Telephone: +32-14-672511 Web: http://www.resinex.com/ Availability: Europe

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