

Hostaform® S 27072 WS 10/1570

Acetal (POM) Copolymer

Ticona



Prospector

Product Description

Chemical abbreviation according to ISO 1043-1: POM-HI
Molding compound ISO 9988- POM-K, M-GCLP, 05-001

Modifiedes POM copolymer

Easy flowing, elastomer-containing injection molding type in color modifying black 10/1570; especially weathering resistant; lower chemical resistanc than the basic type HOSTAFORM C 27021; high resistance to thermal and oxidative degradation.

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

Ranges of applications: for molded parts with matt surface.

FMVSS = Federal Motor Vehicle Safety Standard (USA)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America • South America
Additive	• Impact Modifier		
Features	• Copolymer • Good Flow	• Good Weather Resistance • Impact Modified	
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• POM-HI		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.39 g/cm ³	1.39 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	1.28 in ³ /10min	21.0 cm ³ /10min	ISO 1133
Water Absorption (Saturation, 73°F (23°C))	0.70 %	0.70 %	ISO 62

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	290000 psi	2000 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	6670 psi	46.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	8.0 %	8.0 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	35 %	35 %	ISO 527-2/1A/50
Tensile Creep Modulus			ISO 899-1
1 hr	261000 psi	1800 MPa	
1000 hr	145000 psi	1000 MPa	
Flexural Modulus (73°F (23°C))	305000 psi	2100 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F (-30°C)	3.8 ft-lb/in ²	8.0 kJ/m ²	
73°F (23°C)	5.2 ft-lb/in ²	11 kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	52 ft-lb/in ²	110 kJ/m ²	
73°F (23°C), Partial Break	71 ft-lb/in ²	150 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	183 °F	84.0 °C	
Vicat Softening Temperature	275 °F	135 °C	ISO 306/B50
Melting Temperature	331 °F	166 °C	ISO 11357-3
CLTE - Flow	0.000067 in/in/°F	0.00012 cm/cm/°C	ISO 11359-2

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate ² (0.0394 in (1.00 mm))	< 3.9 in/min	< 100 mm/min	ISO 3795

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Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
ISO Type	POM-K, M-GCLP, 05-001	POM-K, M-GCLP, 05-001	ISO 9988-1

Injection	Nominal Value (English)	Nominal Value (SI)
Processing (Melt) Temp	374 to 446 °F	190 to 230 °C
Mold Temperature	140 to 176 °F	60.0 to 80.0 °C
Screw L/D Ratio	15.0:1.0 to 25.0:1.0	15.0:1.0 to 25.0:1.0

Notes

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

² FMVSS 302, >1 mm

Revision History

Document Created: Tuesday, January 04, 2011
 Added to Prospector: April, 2005
 Last Updated: 9/9/2010