HOSTAFORM C 9021

POM Celanese

Product Texts

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

POM copolymer

Standard-Injection molding type with high rigidity, hardness and toughness; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation.

Fulfils EG-directive 2002/72/EU as well as the recommendation XXXIII for consumer goods of the BgVV,
FDA compliant according to 21 CFR 177.2470

UL-registration for all colours and a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B electrical 110 °C, mechanical 90 °C.

Burning rate ISO 3795 and FMVSS 302 than 1 mm.

Ranges of applications: automotive engineering, precision engineering, electric and electronical industry, domestic appliances.

FDA = Food and Drug Administration (USA)
BgVV = Bundesinstitut fr gesundheitlichen Verbraucherschutz und Veterin rmedizin
FMVSS = Federal Motor Vehicle Safety Standard (USA)
UL = Underwriters Laboratories (USA)

Rheological properties	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**8**	cm³/10min	ISO 1133
Temperature	**190**	°C	-
Load	**2.16**	kg	-
[C] Molding shrinkage, parallel	**2.0**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.8**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2850**	MPa	ISO 527-1/-2
[C] Yield stress	**64**	MPa	ISO 527-1/-2
[C] Yield strain	**9**	%	ISO 527-1/-2
[C] Nominal strain at break	**30**	%	ISO 527-1/-2
[C] Tensile creep modulus, 1h	**2500**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	**1300**	MPa	ISO 899-1
[C] Charpy impact strength, +23°C	**180**[P]	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**160**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**6.5**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6**	kJ/m²	ISO 179/1eA

P: Partial Break [C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**166**	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**104**	°C	ISO 75-1/-2

[C] Vicat softening temperature, 50°C/h 50N	**150**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**110**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**110**	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
Yellow Card available	**yes**	-	-
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**3.0**	mm	-
Yellow Card available	**yes**	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**4**	-	IEC 60250
[C] Relative permittivity, 1MHz	**4**	-	IEC 60250
[C] Dissipation factor, 100Hz	**20**	E-4	IEC 60250
[C] Dissipation factor, 1MHz	**50**	E-4	IEC 60250
[C] Volume resistivity	**1E12**	Ohm*m	IEC 60093
[C] Surface resistivity	**1E14**	Ohm	IEC 60093
[C] Electric strength	**35**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
ISO Data			
[C] Water absorption	**0.65**	%	Sim. to ISO 62
[C] Humidity absorption	**0.2**	%	Sim. to ISO 62
[C] Density	**1410**	kg/m³	ISO 1183

[C]: CAMPUS

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
[C] Density of melt	**1200**	kg/m³	-
[C] Thermal conductivity of melt	**0.155**	W/(m K)	-
[C] Spec. heat capacity of melt	**2210**	J/(kg K)	-
[C] Eff. thermal diffusivity	**4.85E-8**	m²/s	-
[C] Ejection temperature	**165**	°C	-

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Processing conditions acc. ISO	**9988**	-	ISO ....-2
[C] Injection Molding, melt temperature	**205**	°C	ISO 294
Injection Molding, mold temperature	**90**	°C	ISO 10724
Injection Molding, injection velocity	**200**	mm/s	ISO 294
Injection Molding, pressure at hold	**90**	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding

Delivery form
Pellets

Additives
Release agent

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa