

Product Texts

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 05-002 POM copolymer Very easy flowing Injection molding type with high rigidity and hardness; 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 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 < 75 mm/min for a thickness more than 1 mm. Ranges of applications: thin-walled molded parts with unfavourite flow-path-wall thickness relation; multicavity moulds; complicated precision molded parts; short cycle time. FDA = Food and Drug Administration (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

ECO-B: Hostaform ECO-B is a POM-Copolymer with the same properties and performance as standard grades but produced with sustainability in mind. Using a mass-balance approach, biogenic feedstocks are used to offset the use of fossil-based raw materials and decrease greenhouse gas emissions. The process is audited and certified according to the ISCC Plus mass balance approach.

Flammability @1.6mm nom. thickn.	HB	-
Flammability at thickness h (3 mm)	HB	UL recognition (h)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	24	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.8	%	ISO 294-4, 2577
^[C] Density of melt	1200	kg/m ³	-
^[C] Thermal conductivity of melt	0.155	W/(m K)	-
^[C] Spec. heat capacity of melt	2210	J/(kg K)	-
^[C] Ejection temperature	140	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2900	MPa	ISO 527
^[C] Yield stress	65	MPa	ISO 527
^[C] Yield strain	7.5	%	ISO 527
^[C] Nominal strain at break	17	%	ISO 527
^[C] Charpy impact strength, +23°C	170	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	170	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	5.5	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	5.5	kJ/m ²	ISO 179/1eA

[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	106	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	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	-
^[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 62631-2-1
^[C] Relative permittivity, 1MHz	4	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	25	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	50	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	35	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.65	%	Sim. to ISO 62
^[C] Humidity absorption	0.2	%	Sim. to ISO 62
^[C] Density	1410	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Features

Copolymer

Delivery form

Pellets

Chemical Resistance

Alkali Resistance, Solvent Resistance, Hydrolytically Stable

Additives

Release agent

Certifications

Contains renewable resources, Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Drinking water contact, ISCC Plus

Other text information

Injection molding

General drying is not necessary due to low moisture absorption of the resin.

In case of bad storage conditions (water contact or condensed water) the use of a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,2 %
Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Conditioning e.g. moisturizing is not necessary.