

Product Texts

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 04-002, K5 POM copolymer Easy flowing Injection molding type with higher strength, rigidity and hardness with special chalk 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 UL-registration in natural 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: For unlubricated or once-only-lubricant sliding Parts and gear wheels. FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

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

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	11	cm ³ /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	3100	MPa	ISO 527
^[C] Yield stress	64	MPa	ISO 527
^[C] Yield strain	8	%	ISO 527
^[C] Nominal strain at break	15	%	ISO 527
^[C] Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	170	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	105	°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	4.2	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.2	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	25	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	80	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	1440	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	3 - 6	h	-
Processing humidity	≤0.2	%	-
Melt temperature	190 - 210	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Special Characteristics

Platable

Features

Thermal Stability, Copolymer

Chemical Resistance

Alkali Resistance, Solvent Resistance, Hydrolytically Stable, Oxidation Resistance

Applications

Automotive

Regional Availability

North America, Europe, Near East/Africa

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.