

Product Texts

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNS, 03-002 POM copolymer Injection molding type, modified with molybdenum disulphide; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. UL-registration in natural and a thickness more than 1.57 mm as UL 94 HB, temperature index UL 746 B electrical 105 °C, mechanical 90 °C (tensile impact) and 80 °C (tensile). Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: For sliding combinations with high surface pressure and low sliding speed, only slight tendency to stick-slip. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

Flammability @1.6mm nom. HB
 thickn. -
 Flammability at thickness h (3.18 HB
 mm) UL recognition (h)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	8.5	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	2800	MPa	ISO 527
^[C] Yield stress	65	MPa	ISO 527
^[C] Yield strain	9	%	ISO 527
^[C] Nominal strain at break	20	%	ISO 527
^[C] Charpy impact strength, +23°C	120	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	120	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	6	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	100	°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	1.6	mm	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.2	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	0.75	%	Sim. to ISO 62
^[C] Humidity absorption	0.2	%	Sim. to ISO 62
^[C] Density	1420	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, Other Extrusion

Delivery form

Pellets, Natural Color

Additives

Lubricants

Features

Thermal Stability, Copolymer

Chemical Resistance

Alkali Resistance, Solvent Resistance, Hydrolytically Stable, Oxidation Resistance

Certifications

Drinking water contact

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.