

Product Texts

POM copolymer Easy flowing Injection molding type for precision molded parts and thin-walled molded parts 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. Emission according to VDA 275 < 10 mg/kg Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm. Ranges of applications: automotive engineering, precision engineering, electric and electrical industry, domestic appliances. FDA = Food and Drug Administration (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

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	12	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] 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	9	%	ISO 527
^[C] Nominal strain at break	25	%	ISO 527
^[C] Charpy impact strength, +23°C	200	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	200	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	6.5	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	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	20	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

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	3 - 6	h	-
Processing humidity	≤0.1	%	-
Melt temperature	180 - 190	°C	-
Mold temperature	60 - 120	°C	-

Characteristics

Processing

Injection Molding

Delivery form

Pellets

Additives

Release agent

Features

Low Emission, Thermal Stability, Copolymer

Chemical Resistance

Alkali Resistance, Solvent Resistance, Hydrolytically Stable, Oxidation Resistance

Certifications

Food contact, Food approval 10/2011, Food approval FDA 21 CFR

Applications

Automotive, Electrical and Electronical

Other text information

Injection molding

To achieve low emission values pre drying using a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,1 %

Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Conditioning e.g. moisturizing is not necessary.