

Product Texts

POM copolymer Injection molding type, reinforced with ca 26 % glass fibers; high resistance to thermal and oxidative degradation; reduced thermal expansion and shrinkage. Product is compliant with European Food Regulation EU 10/2011 and FDA Food Regulation FDA21CFR 177.2470 Ranges of applications: For molded parts with very high strength and rigidity as well as higher hardness.

Flammability @1.6mm nom. HB
thickn.

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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	4	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.0	%	ISO 294-4, 2577
^[C] Density of melt	1350	kg/m ³	-
^[C] Thermal conductivity of melt	0.215	W/(m K)	-
^[C] Spec. heat capacity of melt	1810	J/(kg K)	-
^[C] Eff. thermal diffusivity	6.51E-8	m ² /s	-
^[C] Ejection temperature	140	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	9200	MPa	ISO 527
^[C] Stress at break	135	MPa	ISO 527
^[C] Strain at break	2.5	%	ISO 527
^[C] Charpy impact strength, +23°C	30	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	35	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	8	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	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	160	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 8.00 MPa	125	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	40	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	80	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	4.3	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.3	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	30	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	60	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	40	kV/mm	IEC 60243-1
[C]: CAMPUS			

Other properties	Value	Unit	Test Standard
[C] Water absorption	0.9	%	Sim. to ISO 62
[C] Humidity absorption	0.17	%	Sim. to ISO 62
[C] Density	1600	kg/m ³	ISO 1183
[C]: CAMPUS			

Characteristics

Processing

Injection Molding

Features

Copolymer

Delivery form

Pellets

Chemical Resistance

Oxidation Resistance

Additives

Release agent

Certifications

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

Special Characteristics

Heat stabilized or stable to heat