

Product Texts

Injection Molding, 25% White Pigments, Low Warpage

ISO 1043 PBT-MX25

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	37	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	1.8	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.7	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3500	MPa	ISO 527
^[C] Stress at break	55	MPa	ISO 527
^[C] Strain at break	3	%	ISO 527
^[C] Tensile creep modulus, 1h	3400	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	2700	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	65	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	50	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA
^[C] Puncture energy, +23°C	3.2	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	75	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	165	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	100	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	100	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 rate, FMVSS, Thickness 1 mm	35.8	mm/min	ISO 3795 (FMVSS 302)
^[C] Oxygen index	20	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	4.5	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	4.2	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	30	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	170	E-4	IEC 62631-2-1
^[C] Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
^[C] Electric strength	26	kV/mm	IEC 60243-1
^[C] Comparative tracking index	450	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.4	%	Sim. to ISO 62
^[C] Humidity absorption	0.2	%	Sim. to ISO 62
^[C] Density	1570	kg/m ³	ISO 1183

[C]: CAMPUS

Material specific properties

	Value	Unit	Test Standard
ISO Data			
^[C] Viscosity number	105	cm³/g	ISO 307, 1157, 1628
[C]: CAMPUS			

Test specimen production

	Value	Unit	Test Standard
ISO Data			
^[C] Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
[C]: CAMPUS			

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

Characteristics

Processing Injection Molding	Special Characteristics Heat stabilized or stable to heat
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Delivery form Pellets	Features Light Blocking, Low Warpage
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Additives Release agent	Regional Availability North America, Europe, Asia Pacific, South and Central America, Near East/Africa
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Other text information

Injection molding

PREPROCESSING
Residual moisture content: 0.00 - 0.02 %
Drying temperature circulating air dryer: 120 °C

Drying time circulating air dryer: 4 - 8 h

PROCESSING
Melt temperature (Tmin - Tmax): 250 - 270 °C

Mold temperature: 80 - 100 °C