Pocan® B1501 000000

PBT Envalior

Product Texts

Injection Molding, Unreinforced, Extrusion, Food Contact Quality

ISO 1043 PBT

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**16**	cm³/10min	ISO 1133
Temperature	**250**	°C	-
Load	**2.16**	kg	-
[C] Molding shrinkage, parallel	**1.8**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.8**	%	ISO 294-4, 2577
Thermal conductivity of melt	**0.25**	W/(m K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2600**	MPa	ISO 527
[C] Yield stress	**60**	MPa	ISO 527
[C] Yield strain	**4**	%	ISO 527
Flexural modulus, 23°C	**2600**	MPa	ISO 178
[C] Tensile creep modulus, 1h	**2200**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	**1300**	MPa	ISO 899-1
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**195**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**10**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**10**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**10**	kJ/m²	ISO 180/1A
Izod notched impact strength	**10**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
[C] Puncture - maximum force, +23°C	**3560**	N	ISO 6603-2
[C] Puncture energy, +23°C	**43**	J	ISO 6603-2
Ball indentation hardness	**120**	MPa	ISO 2039-1

[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	**55**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**150**	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**110**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**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] Oxygen index	**24**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.4**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.2**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**15**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**190**	E-4	IEC 62631-2-1
[C] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**27**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	**0.5**	%	Sim. to ISO 62
[C] Humidity absorption	**0.2**	%	Sim. to ISO 62
[C] Density	**1310**	kg/m³	ISO 1183
Bulk density	**800**	kg/m³	-

[C]: CAMPUS

Material specific properties	Value	Unit	Test Standard
ISO Data			
[C] Viscosity number	**140**	cm³/g	ISO 307, 1157, 1628

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	**250**	°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 - 260**	°C	-
Mold temperature	**80 - 100**	°C	-

Characteristics

Processing
Injection Molding, Other Extrusion

Delivery form
Pellets

Additives
Release agent

Certifications
Food contact

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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 - 260 °C

Mold temperature: 80 - 100 °C