Pocan® S1506 000000

PBT-I — Envalior

Product Texts

Injection Molding, Unreinforced, Extrusion, Improved Impact

ISO 1043 PBT-I

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**14**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**5**	kg	-
[C] Molding shrinkage, parallel	**2.0**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.8**	%	ISO 294-4, 2577
Thermal conductivity of melt	**0.22**	W/(m K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**1700**	MPa	ISO 527
[C] Yield stress	**35**	MPa	ISO 527
[C] Yield strain	**4.5**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
Flexural modulus, 23°C	**1600**	MPa	ISO 178
[C] Tensile creep modulus, 1h	**1400**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	**700**	MPa	ISO 899-1
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**75**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**25**	kJ/m²	ISO 179/1eA
Izod impact strength, +23°C	**N**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C	**70**	kJ/m²	ISO 180/1A
Izod notched impact strength	**20**	kJ/m²	ISO 180/1A
Temperature	**-30**	°C	-
Ball indentation hardness	**70**	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	**90**	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**130**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**130**	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	**75.4**	mm/min	ISO 3795 (FMVSS 302)
[C] Oxygen index	**22**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.2**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.1**	-	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] Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**28**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600**	-	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	**1200**	kg/m³	ISO 1183
Bulk density	**700**	kg/m³	-

[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, Other Extrusion

Delivery form
Pellets

Additives
Release agent

Special Characteristics
High impact or impact modified, Heat stabilized or stable to heat

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 - 270 °C

Mold temperature: 80 - 100 °C