Pocan® BFN2502 000000

PBT FR(40) Envalior

Product Texts

Injection Molding, Unreinforced, Flame Retardant (halogen free)

ISO 1043 PBT FR(40)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**20**	cm³/10min	ISO 1133
Temperature	**260**	°C	-
Load	**2.16**	kg	-
[C] Molding shrinkage, parallel	**2.3**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**2.2**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2900**	MPa	ISO 527
[C] Yield stress	**40**	MPa	ISO 527
[C] Yield strain	**2.6**	%	ISO 527
[C] Nominal strain at break	**5.5**	%	ISO 527
Flexural modulus, 23°C	**3000**	MPa	ISO 178
Flexural strength	**75**	MPa	ISO 178
[C] Charpy impact strength, +23°C	**22**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**22**	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	**18**	kJ/m²	ISO 180/1U

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**220**	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**73**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**166**	°C	ISO 75-1/-2
Vicat softening temperature, B	**215**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**100**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**110**	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	**V-0**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
[C] Burning Behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-
[C] Burning Behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**3.0**	mm	-
[C] Oxygen index	**36**	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (1)	**0.4**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (2)	**0.75**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
GWFI - thickness tested (3)	**1.5**	mm	-
Glow Wire Ignition Temperature (GWIT)	**750**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**0.4**	mm	-
Glow Wire Ignition Temperature (GWIT)	**725**	°C	IEC 60695-2-13
GWIT - thickness tested (2)	**0.75**	mm	-
Glow Wire Ignition Temperature (GWIT)	**725**	°C	IEC 60695-2-13
GWIT - thickness tested (3)	**1.5**	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**3.4**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**3.3**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**69**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**59**	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	**31**	kV/mm	IEC 60243-1
[C] Comparative tracking index	**600**	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1330**	kg/m³	ISO 1183
Bulk density	**800**	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**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**250 - 270**	°C	-
Mold temperature	**70 - 90**	°C	-

Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant, Halogen-free, Heat stabilized or stable to heat

Delivery form
Pellets

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
admissible residence time at Tmax: <5 min
Mold temperature: 70 - 90 °C