

Pocan® BFN4221 000000
PBT-GF20 FR(40+30)

Envalior

Injection Molding, 20% Glass Reinforced, Flame Retardant (halogen free)

ISO 1043 PBT-GF20 FR(40+30)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	15	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	8500	MPa	ISO 527
Stress at Break	90	MPa	ISO 527
Strain at Break	2.4	%	ISO 527
Impact Strength (Charpy), +23°C	35	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	30	kJ/m ²	ISO 179/1eU
Flexural Modulus (23°C)	8300	MPa	ISO 178
Flexural strength	140	MPa	ISO 178
Impact Strength (Izod), 23°C	30	kJ/m ²	ISO 180/1U

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	207	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	222	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	30	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Burning Behav. 5V at Thickness h	5VA	class	IEC 60695-11-20
Thickness tested	1.5	mm	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (1)	0.4	mm	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (2)	0.75	mm	-
Glow Wire (GWFI, Flammability Index)	960	°C	IEC 60695-2-12
GWFI - thickness tested (3)	1.5	mm	-
Glow Wire Ignition Temperature)	775	°C	IEC 60695-2-13
GWIT - thickness tested (1)	0.4	mm	-
Glow Wire Ignition Temperature)	775	°C	IEC 60695-2-13
GWIT - thickness tested (2)	0.75	mm	-
Glow Wire Ignition Temperature)	800	°C	IEC 60695-2-13
GWIT - thickness tested (3)	1.5	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Volume Resistivity	1E13	Ohm*m	IEC 62631-3-1
Electric Strength	33	kV/mm	IEC 60243-1
Comparative tracking index	525	-	IEC 60112
Comparative tracking index	600	-	UL 746A

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1470	kg/m ³	ISO 1183
Bulk density	800	kg/m ³	-

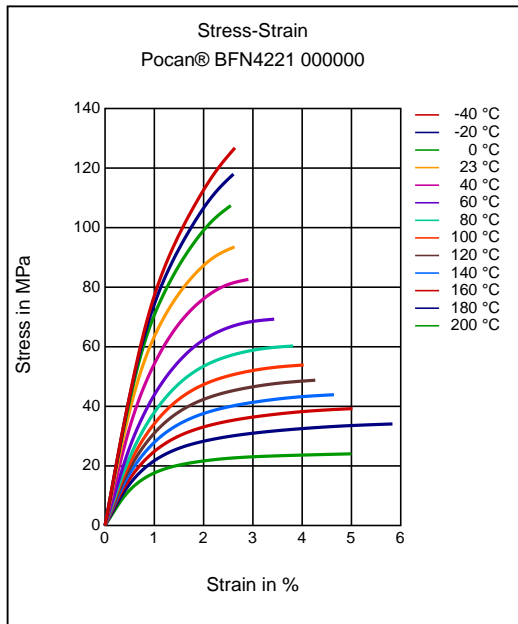
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294

Injection Molding, mold temperature 80 °C ISO 294

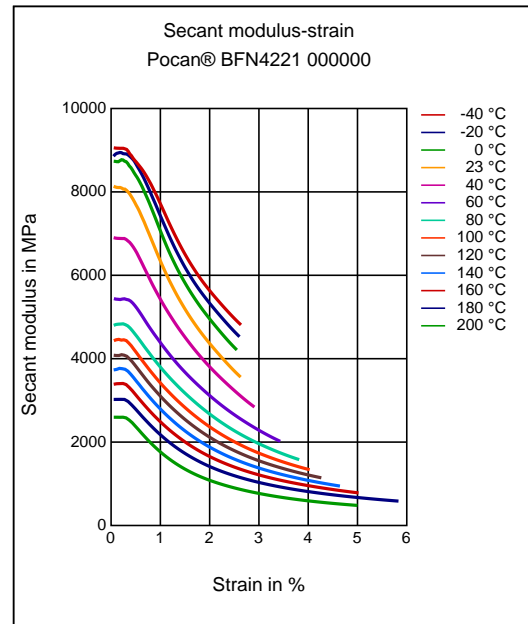
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Melt temperature	250 - 270	°C	-
Mold temperature	70 - 90	°C	-

Diagrams

Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Flame retardant, Halogen-free, Heat aging stabilized

Injection Molding

PREPROCESSING

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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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