

Pocan® BFN4211 000000

PBT-GF13 FR(40+30)

Envalior

Injection Molding, 13% Glass Reinforced, Flame Retardant (halogen free)

ISO 1043 PBT-GF13 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	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	1.1	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	6200	MPa	ISO 527
Stress at Break	75	MPa	ISO 527
Strain at Break	2.7	%	ISO 527
Impact Strength (Charpy), +23°C	30	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	25	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10	kJ/m ²	ISO 179/1eA

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)	190	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	40	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	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric Strength	33.4	kV/mm	IEC 60243-1
Comparative tracking index	550	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1430	kg/m ³	ISO 1183

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

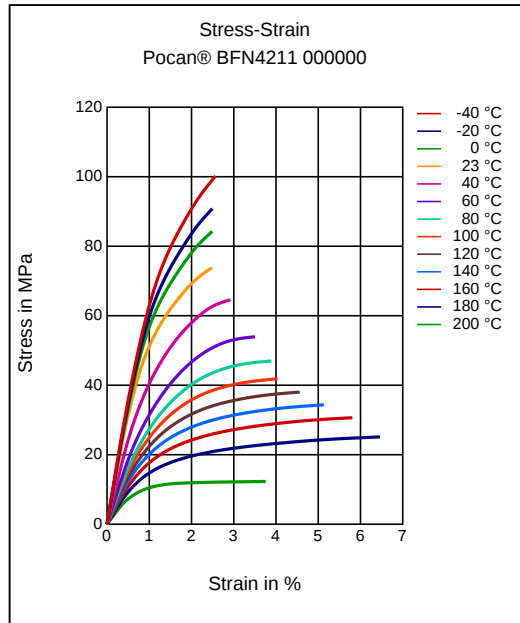
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	70 - 90	°C	-

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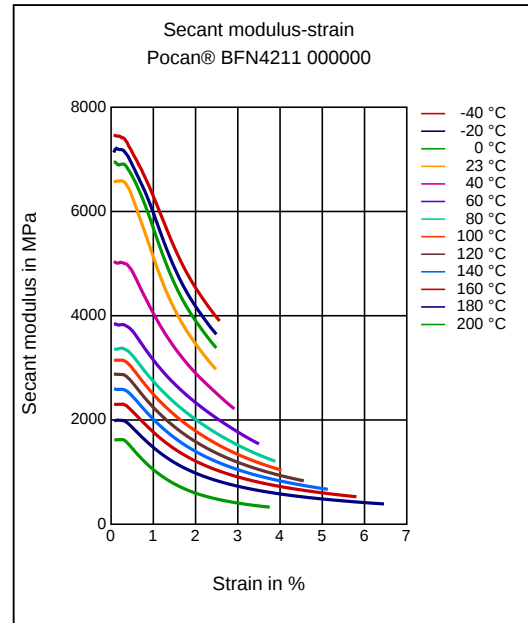
Envalior

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

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