

Pocan[®] BFN4221

PBT–GF20 FR(40+30)

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

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES		VALUE	
Melt volume–flow rate	15	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.2	%	ISO 294–4
Molding shrinkage (parallel)	0.7	%	ISO 294–4
MECHANICAL PROPERTIES		VALUE	
Tensile modulus	8500	MPa	ISO 527–1/–2
Stress at break	90	MPa	ISO 527–1/–2
Strain at break	2.4	%	ISO 527–1/–2
Flexural modulus	8300	MPa	ISO 178
Flexural strength	140	MPa	ISO 178
Flexural strain at flexural strength	2.4	%	ISO 178–A
Charpy impact strength (+23°C)	35	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	30	kJ/m ²	ISO 179/1eU
Izod impact strength (+23°C)	30	kJ/m ²	ISO 180/1U
Izod impact strength (–30°C)	25	kJ/m ²	ISO 180–1U
THERMAL PROPERTIES		VALUE	
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)	0.3	E–4/°C	ISO 11359–1/–2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Coeff. of linear therm. expansion (normal)	0.9	E-4/°C	ISO 11359-1/-2
Burning Behav. at 0.75 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.4	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	0.75	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	775	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.4	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	775	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	0.75	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (3) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	800	°C	IEC 60695-2-13
GWIT (Thickness (4) tested)	3	mm	IEC 60695-2-13
ELECTRICAL PROPERTIES		VALUE	
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	525	V	IEC 60112
Comparative tracking index (PLC)	0	class	UL 746A
OTHER PROPERTIES		VALUE	
Density	1470	kg/m³	ISO 1183

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
PROCESSING RECOMMENDATIONS	VALUE		
Drying temperature circulating air dryer	120	°C	
Drying time circulating air dryer	4–8	h	
Melt temperature (Tmin – Tmax)	250–265	°C	
Mold temperature	70–90	°C	
admissible residence time at Tmax	<5	min	