

# Pocan<sup>®</sup> BF4222Z

## PBT-I-GF25 FR(17)

25% Glass Reinforced, Injection Molding, Flame Retardant, Improved Impact

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>			
	VALUE		
Melt volume-flow rate	28	cm <sup>3</sup> /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	5	kg	ISO 1133
Molding shrinkage (normal)	1	%	ISO 294-4
Molding shrinkage (parallel)	0.3	%	ISO 294-4
<b>MECHANICAL PROPERTIES</b>			
	VALUE		
Tensile modulus	8700	MPa	ISO 527-1/-2
Stress at break	115	MPa	ISO 527-1/-2
Strain at break	3.3	%	ISO 527-1/-2
Flexural modulus	7800	MPa	ISO 178
Flexural strength	195	MPa	ISO 178
Flexural strain at flexural strength	3.6	%	ISO 178-A
Charpy impact strength (+23°C)	70	kJ/m <sup>2</sup>	ISO 179/1eU
Izod impact strength (+23°C)	55	kJ/m <sup>2</sup>	ISO 180/1U
<b>THERMAL PROPERTIES</b>			
	VALUE		
Melting temperature (10°C/min)	225	°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)	0.3	E-4/°C	ISO 11359-1/-2
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

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
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
Oxygen index	32	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.75	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	750	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.75	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	725	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1.5	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	725	°C	IEC 60695-2-13
GWIT (Thickness (3) tested)	3	mm	IEC 60695-2-13

### *ELECTRICAL PROPERTIES*

#### *VALUE*

Relative permittivity (100Hz)	3.8	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.7	–	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	200	V	IEC 60112
Comparative tracking index (PLC)	3	class	UL 746A

### *OTHER PROPERTIES*

#### *VALUE*

Density	1560	kg/m <sup>3</sup>	ISO 1183
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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b><i>PROCESSING RECOMMENDATIONS</i></b>			
Drying temperature circulating air dryer	120	°C	
Drying time circulating air dryer	4–8	h	
Residual moisture content	0.00–0.02	%	acc. to Karl Fischer
Melt temperature (Tmin – Tmax)	240–260	°C	
Mold temperature	80–100	°C	