

Pocan[®] B4215

PBT—GF12 FR(17)

12% Glass Reinforced, Injection Molding, Flame Retardant

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES		VALUE	
Melt volume—flow rate	22	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.1	%	ISO 294-4
Molding shrinkage (parallel)	0.8	%	ISO 294-4
MECHANICAL PROPERTIES		VALUE	
Tensile modulus	5800	MPa	ISO 527-1/-2
Stress at break	100	MPa	ISO 527-1/-2
Strain at break	2.5	%	ISO 527-1/-2
Flexural modulus	5700	MPa	ISO 178
Flexural strength	155	MPa	ISO 178
Flexural strain at flexural strength	3.2	%	ISO 178-A
Charpy impact strength (+23°C)	25	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	25	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	4	kJ/m ²	ISO 179/1eA
Izod impact strength (+23°C)	20	kJ/m ²	ISO 180/1U
Izod impact strength (-30°C)	20	kJ/m ²	ISO 180-1U
THERMAL PROPERTIES		VALUE	
Melting temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	185	°C	ISO 75-1/-2



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Temp. of deflection under load (0.45 MPa)	210	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.4	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1	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
Oxygen index	32	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	2	mm	IEC 60695-2-12

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	3.6	—	IEC 62631-2-1
Relative permittivity (1 MHz)	3.4	—	IEC 62631-2-1
Dissipation factor (100 Hz)	40	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	190	E-4	IEC 62631-2-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	29	kV/mm	IEC 60243-1
Comparative tracking index	200	V	IEC 60112
Comparative tracking index (PLC)	3	class	UL 746A

OTHER PROPERTIES	VALUE		
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1510	kg/m³	ISO 1183

PROCESSING RECOMMENDATIONS	VALUE		
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



Property Data

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Melt temperature (Tmin – Tmax)	240–260	°C	
Mold temperature	80–100	°C	

