

Pocan[®] DP7102

PBT-I-MX32

32% Mineral Reinforced, Injection Molding, Laser Direct Structuring (LDS)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Melt volume–flow rate	12	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	1.4	%	ISO 294–4
Molding shrinkage (parallel)	1.4	%	ISO 294–4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	5800	MPa	ISO 527–1/–2
Stress at break	50	MPa	ISO 527–1/–2
Strain at break	2	%	ISO 527–1/–2
Flexural modulus	6400	MPa	ISO 178
Flexural strength	95	MPa	ISO 178
Flexural strain at flexural strength	3	%	ISO 178–A
Charpy impact strength (+23°C)	35	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	2	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	2	kJ/m ²	ISO 179/1eA
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)	225	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	115	°C	ISO 75–1/–2

Property Data

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Temp. of deflection under load (0.45 MPa)	195	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.7	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 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	3.7	—	IEC 62631-2-1
Relative permittivity (1 MHz)	3.5	—	IEC 62631-2-1
Dissipation factor (100 Hz)	32	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	149	E-4	IEC 62631-2-1

OTHER PROPERTIES	VALUE		
Density	1570	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
Melt temperature (Tmin – Tmax)	250-270	°C	
Mold temperature	80-100	°C	