

Pocan[®] KL1–7033

PBT–I–GF30

30% Glass Reinforced, Injection Molding, Improved Impact

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	VALUE		
Melt volume–flow rate	13	cm ³ /10min	ISO 1133
Temperature	260	°C	ISO 1133
Load	5	kg	ISO 1133
Molding shrinkage (normal)	0.9	%	ISO 294–4
Molding shrinkage (parallel)	0.4	%	ISO 294–4
MECHANICAL PROPERTIES			
	VALUE		
Tensile modulus	8000	MPa	ISO 527–1/–2
Stress at break	95	MPa	ISO 527–1/–2
Strain at break	4	%	ISO 527–1/–2
Flexural strain at flexural strength	3.8	%	ISO 178–A
Charpy impact strength (+23°C)	65	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	65	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	10	kJ/m ²	ISO 179/1eA
Izod impact strength (–30°C)	55	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)	195	°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)	1	E–4/°C	ISO 11359–1/–2

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695–11–10
Thickness tested	1.5	mm	IEC 60695–11–10
Burning Behav. at 3.0 mm nom. thickn.	HB	class	IEC 60695–11–10
Thickness tested	3	mm	IEC 60695–11–10
Oxygen index	21	%	ISO 4589–1/–2
Glow Wire Flammability Index GWFI	650	°C	IEC 60695–2–12
GWFI (Thickness (1) tested)	2	mm	IEC 60695–2–12

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	4.6	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.9	–	IEC 62631–2–1
Dissipation factor (100 Hz)	60	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	260	E–4	IEC 62631–2–1
Surface resistivity	>1E15	Ohm	IEC 62631–3–2
Electric strength	28	kV/mm	IEC 60243–1
Comparative tracking index	600	V	IEC 60112

OTHER PROPERTIES	VALUE		
Water absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1460	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	

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Viscosity–shear rate

