

Pocan[®] DPT7140LDS

(PET+PBT)–(GF+MD)44

44% Glass/Mineral Reinforced, Injection Molding, Laser Direct Structuring (LDS)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES		VALUE	
Melt volume–flow rate	21	cm ³ /10min	ISO 1133
Temperature	280	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage (normal)	0.7	%	ISO 294–4
Molding shrinkage (parallel)	0.2	%	ISO 294–4
MECHANICAL PROPERTIES		VALUE	
Tensile modulus	12700	MPa	ISO 527–1/–2
Stress at break	110	MPa	ISO 527–1/–2
Strain at break	1.3	%	ISO 527–1/–2
Flexural modulus	12800	MPa	ISO 178
Flexural strength	170	MPa	ISO 178
Flexural strain at flexural strength	1.7	%	ISO 178–A
Charpy impact strength (+23°C)	30	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	25	kJ/m ²	ISO 179/1eU
Izod impact strength (+23°C)	25	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)	255	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	210	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	250	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.2	E–4/°C	ISO 11359–1/–2

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Coeff. of linear therm. expansion (normal)	0.5	E-4/°C	ISO 11359-1/-2
Burning Behav. at 0.75 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
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

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	4.3	—	IEC 62631-2-1
Relative permittivity (1 MHz)	4.1	—	IEC 62631-2-1
Dissipation factor (100 Hz)	22	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	138	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	275	V	IEC 60112

OTHER PROPERTIES	VALUE		
Density	1740	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)	260-280	°C	
Mold temperature	80-100	°C	

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Viscosity—shear rate

