

Pocan® DPT7140LDS 000000
(PET+PBT)-(MX+MD)15

Envalior

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

ISO 1043 (PET+PBT)-(GF+MX)44

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	21	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	12700	MPa	ISO 527
Stress at Break	110	MPa	ISO 527
Strain at Break	1.3	%	ISO 527
Impact Strength (Charpy), +23°C	30	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	25	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
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	20	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	50	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.3	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.1	-	IEC 62631-2-1
Dissipation Factor, 100Hz	22	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	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	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1740	kg/m ³	ISO 1183

Material Specific Properties	Value	Unit	Test Standard
ISO Data			
Viscosity number	50	cm ³ /g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	110	°C	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-

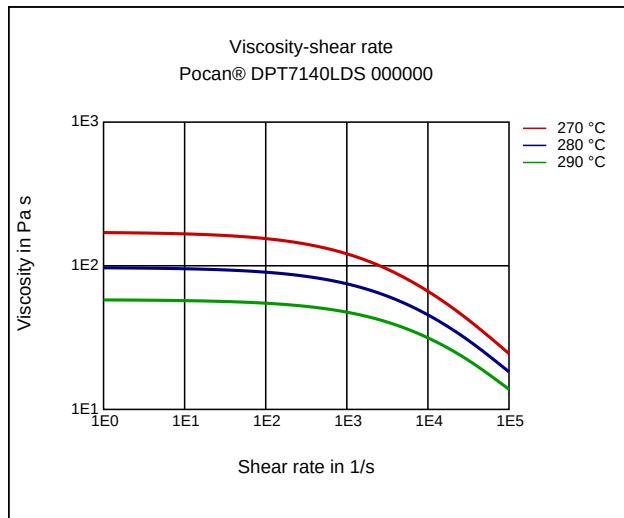
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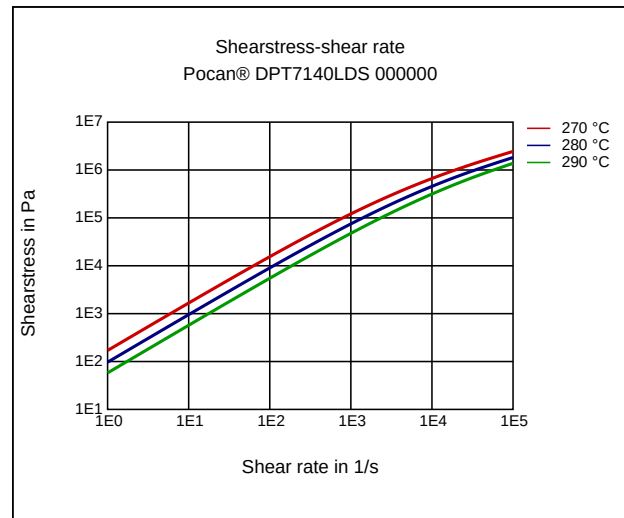
Melt temperature	270 - 290	°C	-
Mold temperature	100 - 130	°C	-

Diagrams

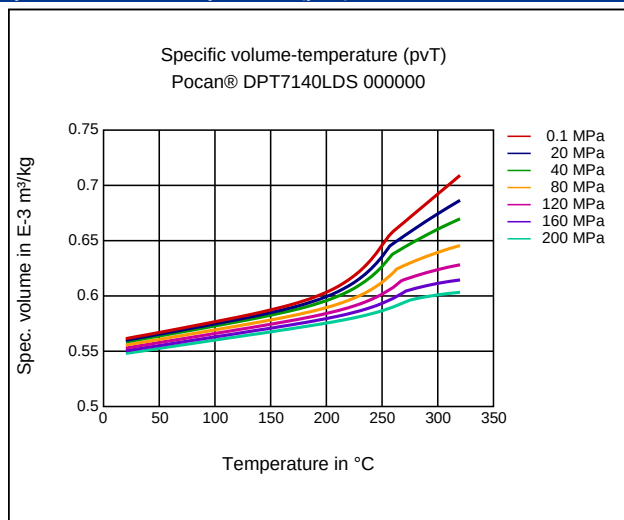
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

Heat aging stabilized

Injection Molding

PREPROCESSING

Residual moisture content: 0.00 - 0.02 %

Drying temperature circulating air dryer: 120 °C

Drying time circulating air dryer: 4 - 8 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 100 - 130 °C