

Pocan® B7375 000000
PBT-MX25

Envalior

Injection Molding, 25% White Pigments, Low Warpage

ISO 1043 PBT-MX25

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	37	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	1.8	%	ISO 294-4, 2577
Molding shrinkage, normal	1.7	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3500	MPa	ISO 527
Stress at Break	55	MPa	ISO 527
Strain at Break	3	%	ISO 527
Tensile Creep Modulus, 1h	3400	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	2700	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	65	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	50	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
Puncture energy, +23°C	3.2	J	ISO 6603-2

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	75	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	165	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	100	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	100	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
Oxygen index	20	%	ISO 4589-1/-2

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.5	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.2	-	IEC 62631-2-1
Dissipation Factor, 100Hz	30	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	170	E-4	IEC 62631-2-1
Volume Resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric Strength	26	kV/mm	IEC 60243-1
Comparative tracking index	450	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1570	kg/m ³	ISO 1183

Material Specific Properties	Value	Unit	Test Standard
ISO Data			
Viscosity number	105	cm ³ /g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Pocan® B7375 000000

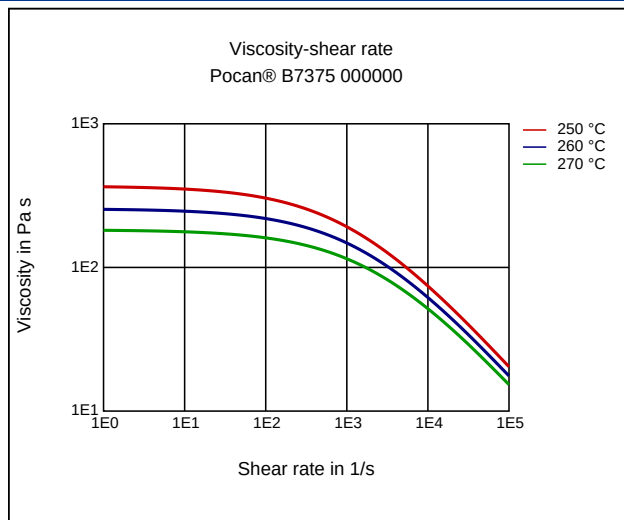
PBT-MX25

Envalior

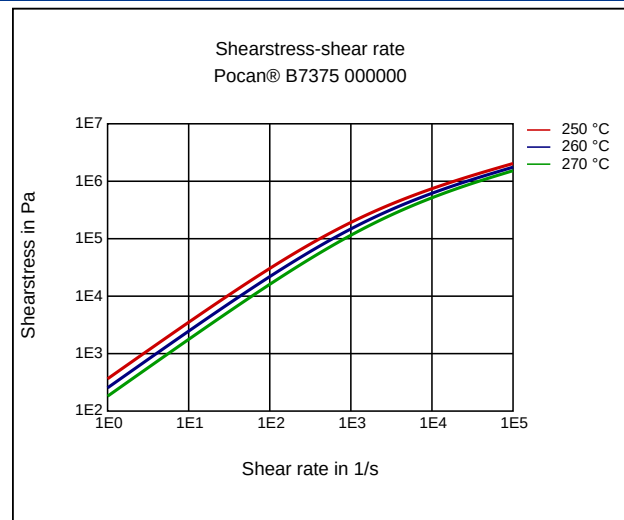
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

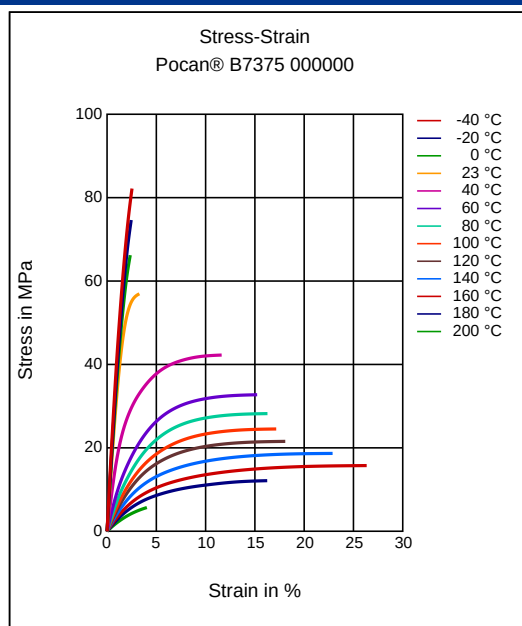
Viscosity-shear rate



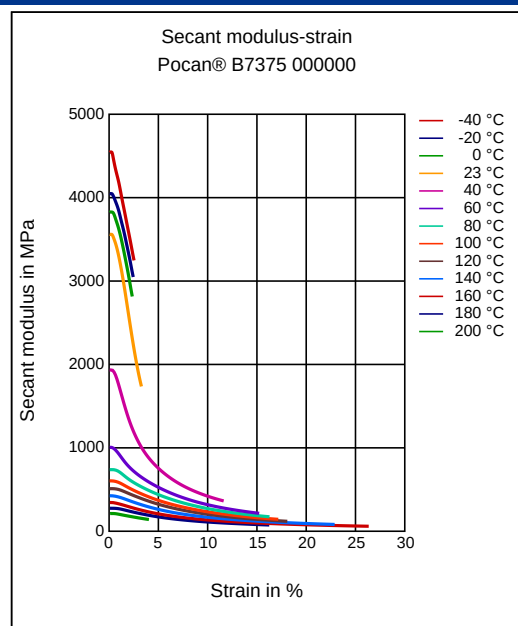
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Special Characteristics

Heat aging stabilized

Pocan® B7375 000000

PBT-MX25

Envalior

Delivery form

Pellets

Features

Light Blocking, Low Warpage

Additives

Release agent

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): 250 - 270 °C

Mold temperature: 80 - 100 °C