

Pocan® B1503 000000

PBT

Envalior

Injection Molding, Unreinforced, Extrusion, General purpose

ISO 1043 PBT

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	18	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	8	%	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	180	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)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	60	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	160	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	120	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	120	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1300	kg/m ³	ISO 1183

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

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	-

Characteristics
Processing

Injection Molding, Other Extrusion

Additives

Lubricants, Release agent

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): 250 - 270 °C

Mold temperature: 80 - 100 °C