

**Pocan® S1506 000000**  
**PBT-I**

Envalior

Injection Molding, Unreinforced, Extrusion, Improved Impact

ISO 1043 PBT-I

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	14	cm <sup>3</sup> /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	1700	MPa	ISO 527
Yield stress	35	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Tensile Creep Modulus, 1h	1400	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	700	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	no break	kJ/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	75	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	25	kJ/m <sup>2</sup>	ISO 179/1eA
Flexural Modulus (23°C)	1600	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	70	kJ/m <sup>2</sup>	ISO 180/1A
Notched Impact Strength (Izod)	20	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	no break	kJ/m <sup>2</sup>	ISO 180/1U
Ball Indentation Hardness	70	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melting Temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	55	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	90	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	130	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	130	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	22	%	ISO 4589-1/-2

Electrical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 100Hz	3.2	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.1	-	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
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	28	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

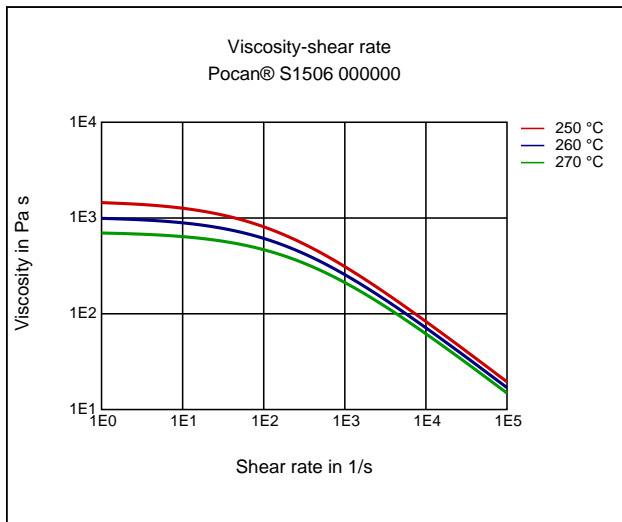
Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1200	kg/m <sup>3</sup>	ISO 1183
Bulk density	700	kg/m <sup>3</sup>	-

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

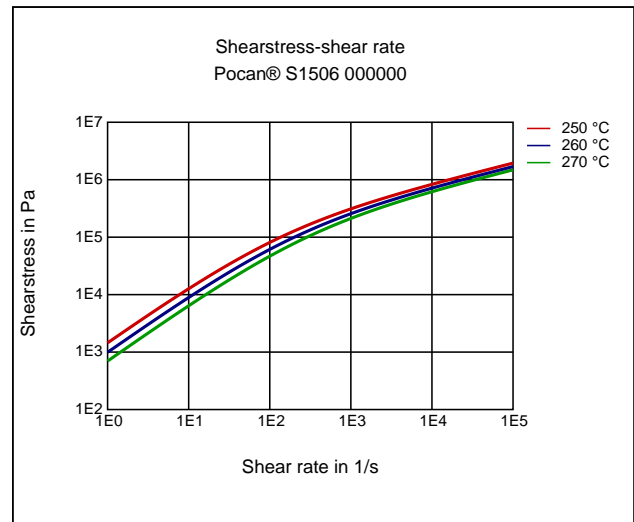
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

## Diagrams

### Viscosity-shear rate



### Shearstress-shear rate



## Characteristics

### Processing

Injection Molding, Other Extrusion

### Delivery form

Pellets

### Additives

Release agent

### Special Characteristics

Impact modified, 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

## Disclaimer

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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