

**Pocan® KL1-7033 000000**  
**PBT-I-GF30**

Envalior

Injection Molding, 30% Glass Reinforced, Improved Impact

ISO 1043 PBT-I-GF30

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	13	cm <sup>3</sup> /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.4	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	8000	MPa	ISO 527
Stress at Break	95	MPa	ISO 527
Strain at Break	4	%	ISO 527
Impact Strength (Charpy), +23°C	65	kJ/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	65	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	12	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10	kJ/m <sup>2</sup>	ISO 179/1eA

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)	195	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	30	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	21	%	ISO 4589-1/-2

Electrical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Relative permittivity, 100Hz	4.6	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.9	-	IEC 62631-2-1
Dissipation Factor, 100Hz	60	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	260	E-4	IEC 62631-2-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	28	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

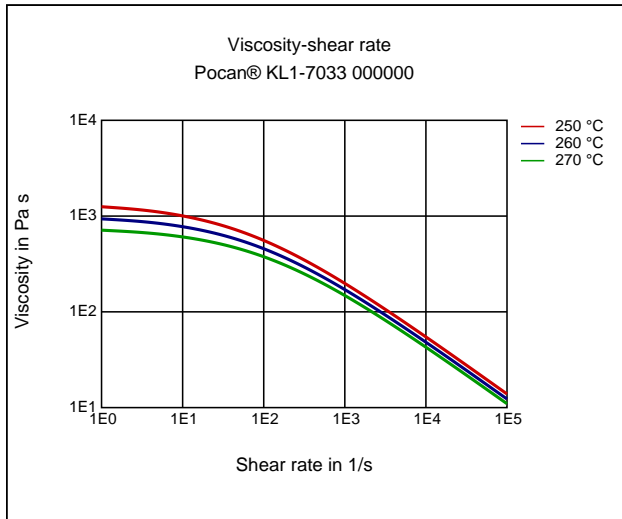
Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1460	kg/m <sup>3</sup>	ISO 1183

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

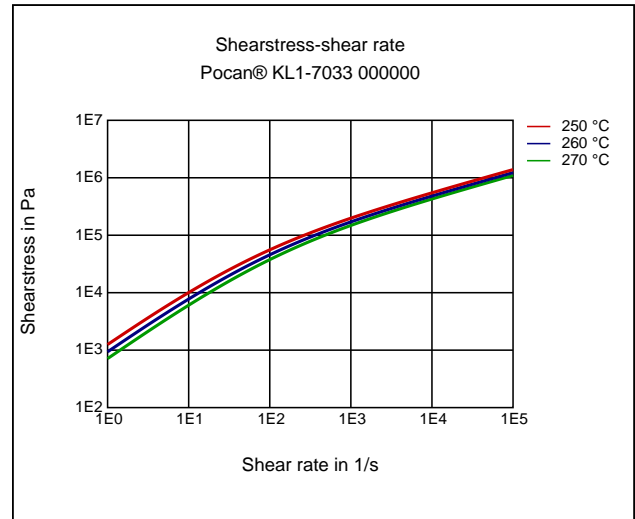
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	250 - 270	°C	-
Mold temperature	80 - 100	°C	-

## Diagrams

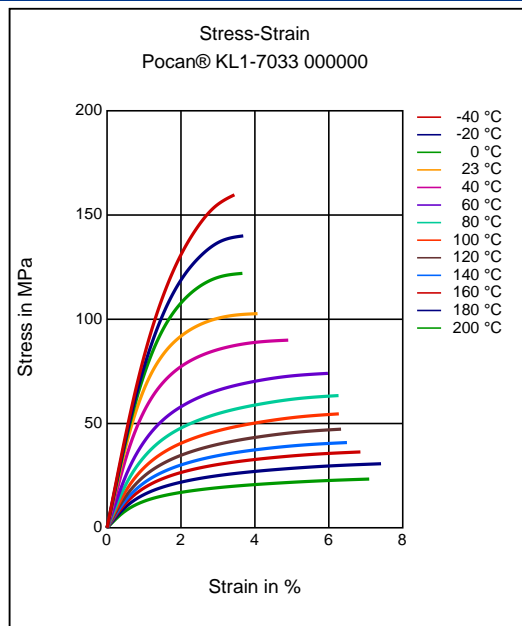
### Viscosity-shear rate



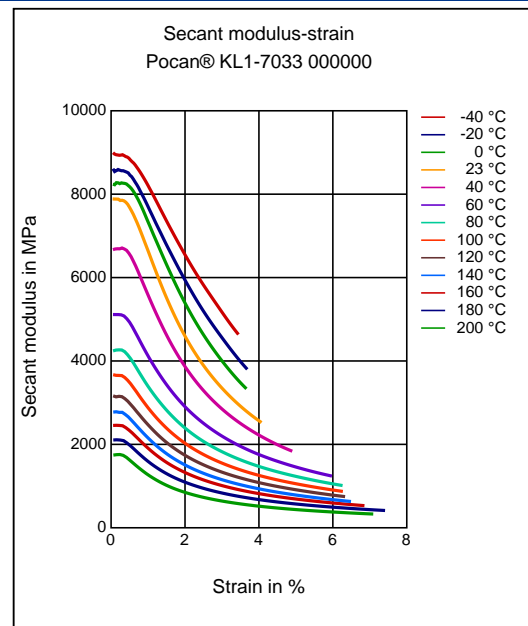
### Shearstress-shear rate



### Stress-strain



### Secant modulus-strain



## Characteristics

### Processing

Injection Molding

### Delivery form

Pellets

### Injection Molding

PREPROCESSING

Residual moisture content: 0.00 - 0.02 %

Drying temperature circulating air dryer: 120 °C

### Special Characteristics

Impact modified, Heat aging stabilized

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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