

Pocan® T7331 000000
 (PBT+PET)-GF30

Envalior

Injection Molding, 30% Glass Reinforced, Excellent Surface Properties

ISO 1043 (PBT+PET)-GF30

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	30	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.9	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10400	MPa	ISO 527
Stress at Break	145	MPa	ISO 527
Strain at Break	2.8	%	ISO 527
Tensile Creep Modulus, 1h	10000	MPa	ISO 899-1
Tensile Creep Modulus, 1000h	8500	MPa	ISO 899-1
Impact Strength (Charpy), +23°C	65	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	55	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	650	N	ISO 6603-2
Puncture energy, +23°C	2.1	J	ISO 6603-2

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	200	°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	90	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
ISO Data			
Relative permittivity, 100Hz	4	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.8	-	IEC 62631-2-1
Dissipation Factor, 100Hz	18	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	27	kV/mm	IEC 60243-1
Comparative tracking index	250	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.1	%	Sim. to ISO 62
Density	1550	kg/m³	ISO 1183

Material Specific Properties	Value	Unit	Test Standard
ISO Data			
Viscosity number	91	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	90	°C	ISO 294

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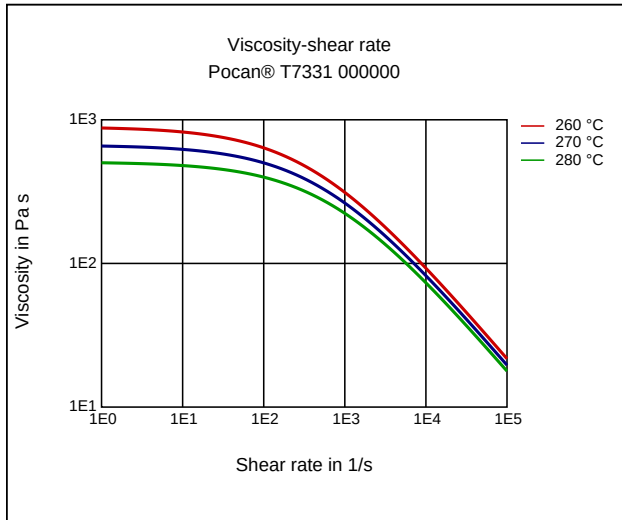
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Processing Recommendation Injection Molding

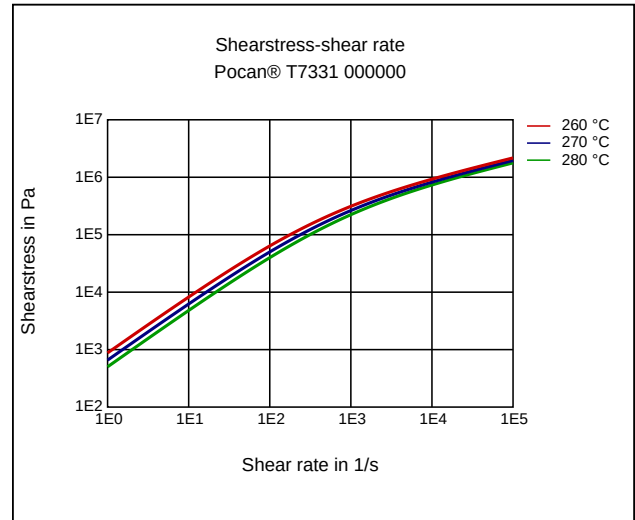
	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	260 - 280	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

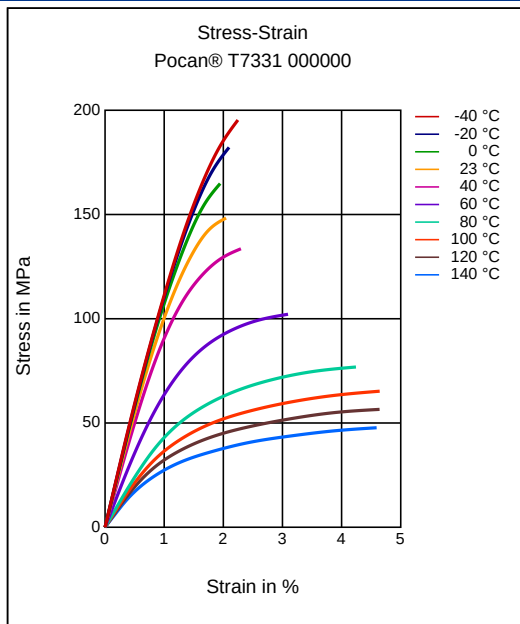
Viscosity-shear rate



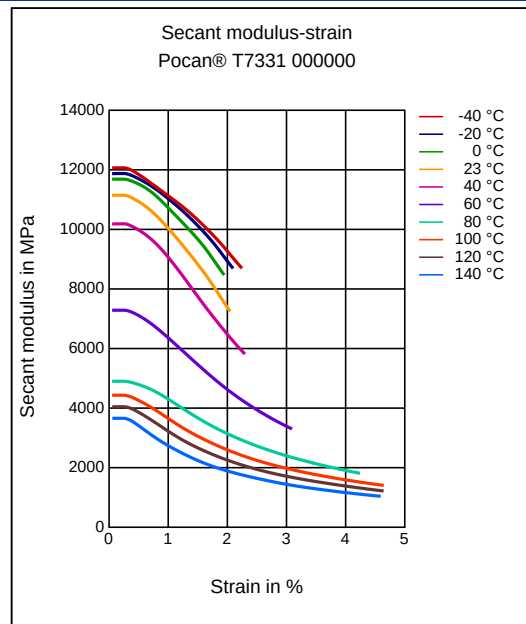
Shearstress-shear rate



Stress-strain



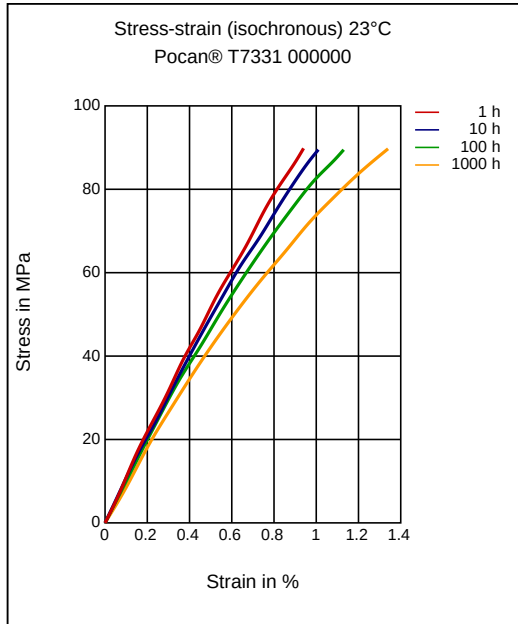
Secant modulus-strain



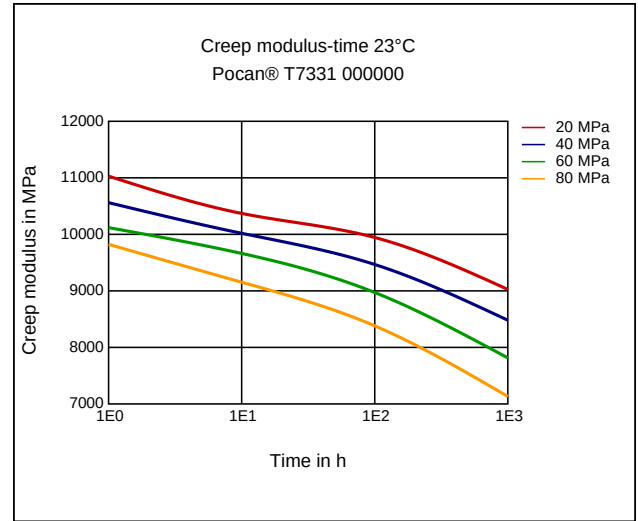
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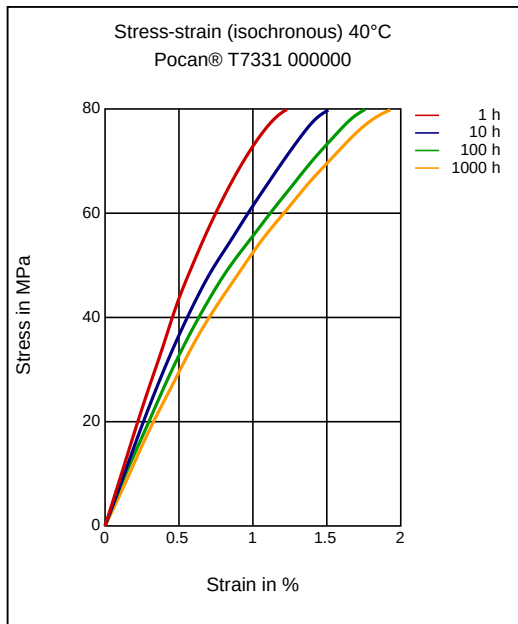
Stress-strain (isochronous) 23°C



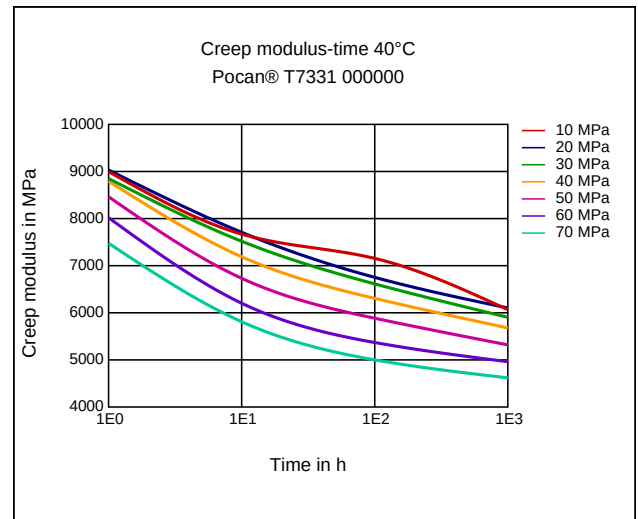
Creep modulus-time 23°C



Stress-strain (isochronous) 40°C



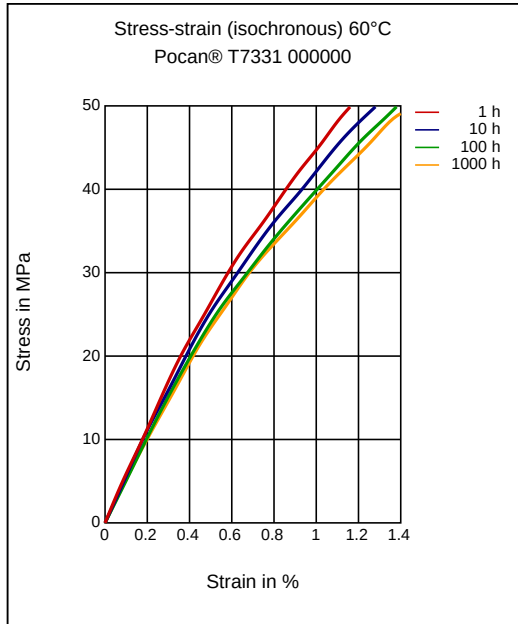
Creep modulus-time 40°C



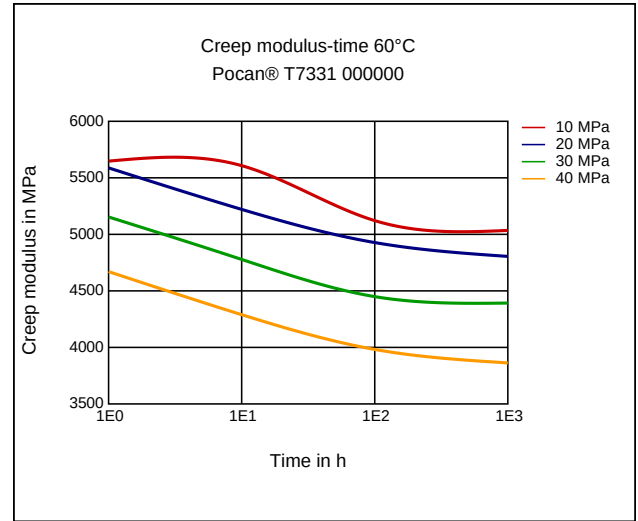
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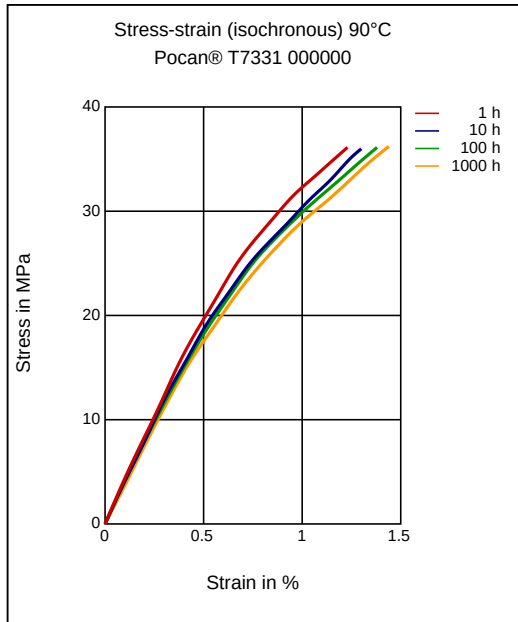
Stress-strain (isochronous) 60 °C



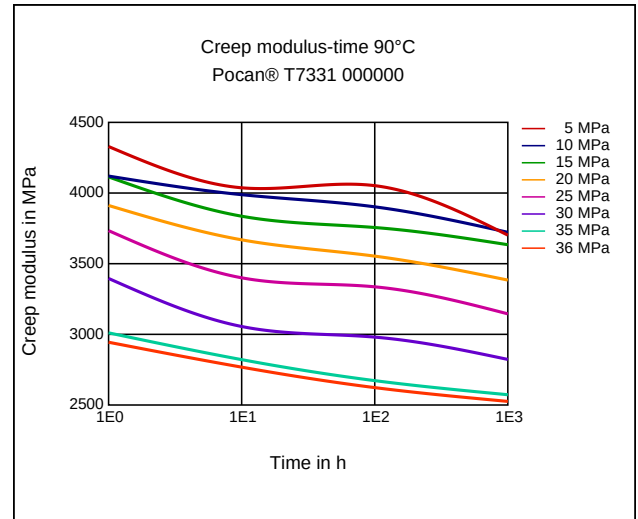
Creep modulus-time 60 °C



Stress-strain (isochronous) 90 °C



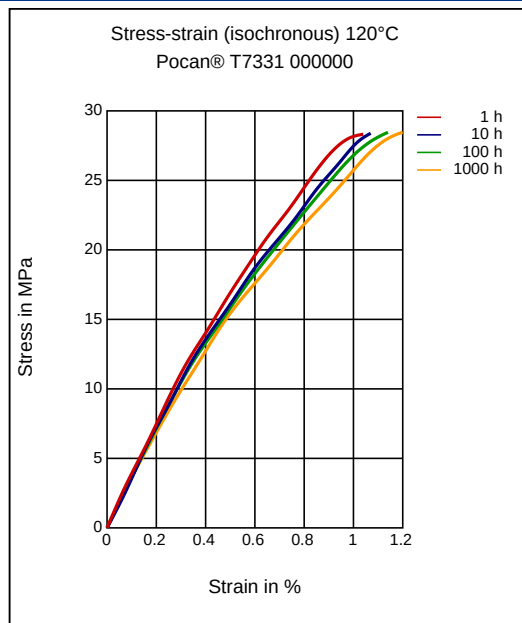
Creep modulus-time 90 °C



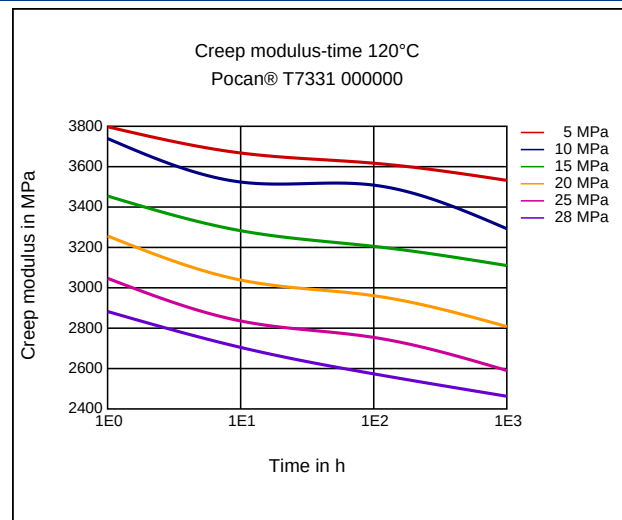
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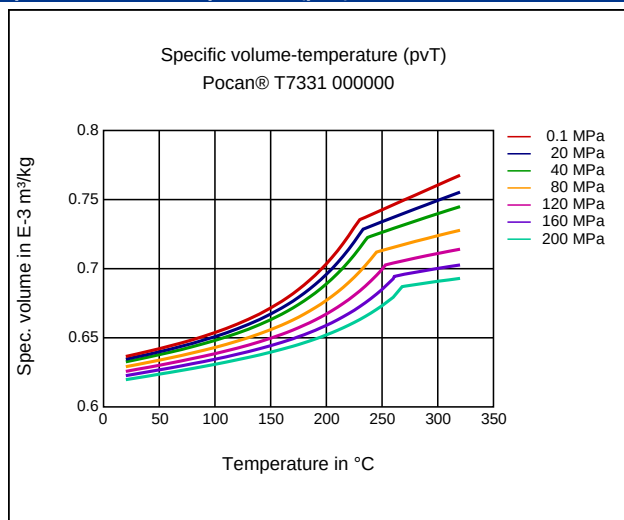
Stress-strain (isochronous) 120 °C



Creep modulus-time 120 °C



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

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

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PROCESSING

Melt temperature (Tmin - Tmax): 260 - 280 °C

Mold temperature: 80 - 100 °C