

Pocan® BF4409 000000
PBT-GF7 FR(17)

Envalior

Injection Molding, 7% Glass Reinforced, Flame Retardant

ISO 1043 PBT-GF7 FR(17)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	1.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	4700	MPa	ISO 527
Stress at Break	80	MPa	ISO 527
Strain at Break	4.4	%	ISO 527
Impact Strength (Charpy), +23°C	45	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	45	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

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)	150	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	205	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	60	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	110	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	V-0	class	UL 94
Thickness tested	1.5	mm	-
Oxygen index	31	%	ISO 4589-1/-2

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.6	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.5	-	IEC 62631-2-1
Dissipation Factor, 100Hz	20	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	190	E-4	IEC 62631-2-1
Surface Resistivity	>1E15	Ohm	IEC 62631-3-2
Electric Strength	27	kV/mm	IEC 60243-1
Comparative tracking index	200	-	IEC 60112

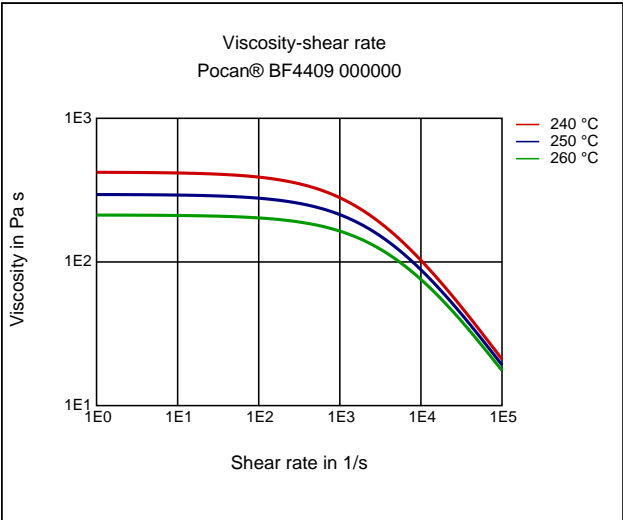
Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1490	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

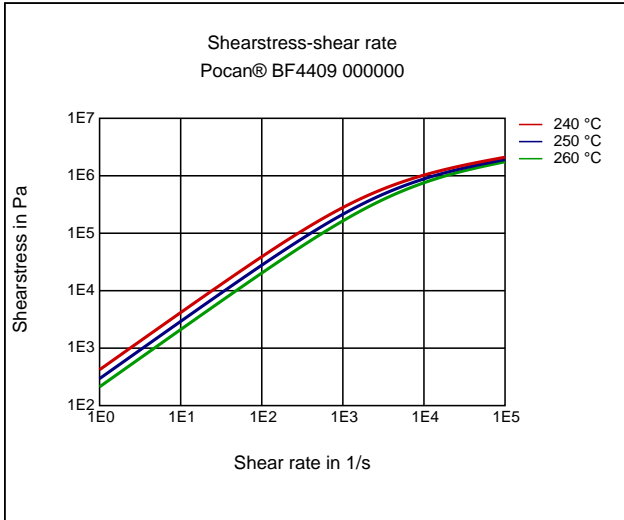
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	240 - 260	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

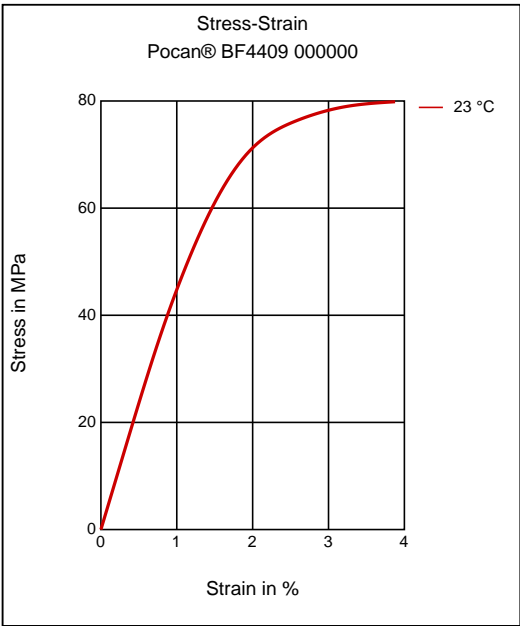
Viscosity-shear rate



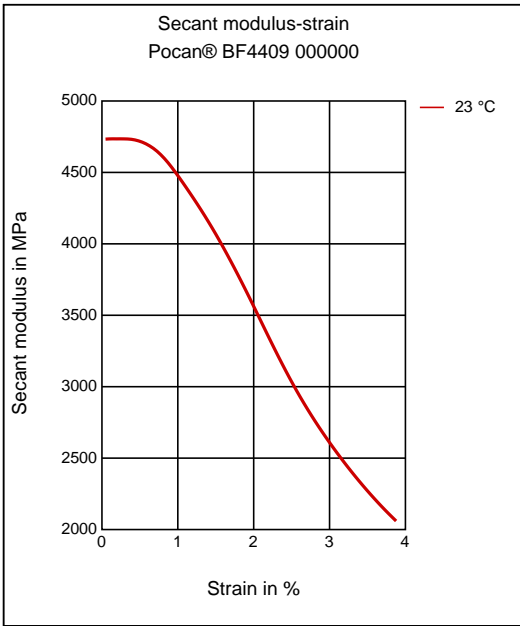
Shearstress-shear rate



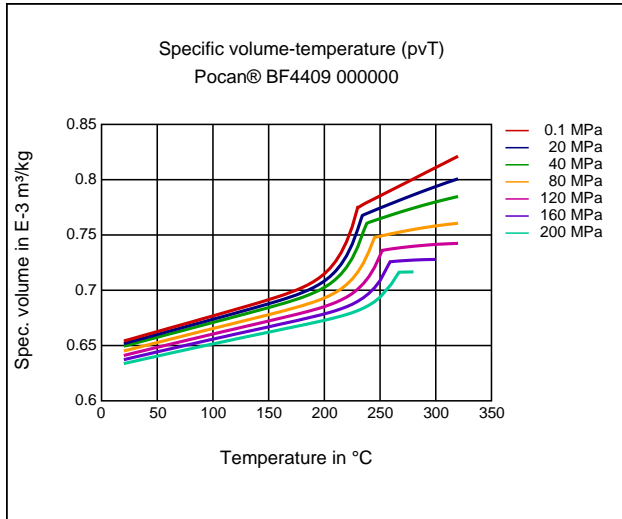
Stress-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Flame retardant, 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): 240 - 260 °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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