

Pocan® B7616 000000
 (PBT+PC)-GF30

Envalior

Injection Molding, 15% Glass Reinforced, Excellent Surface Properties, Low Warpage

ISO 1043 (PBT+PC)-GF15

| Rheological properties | Value | Unit | Test Standard |
|-----------------------------|-------|------------------------|-----------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 17 | cm ³ /10min | ISO 1133 |
| Temperature | 260 | °C | - |
| Load | 2.16 | kg | - |
| Molding shrinkage, parallel | 0.7 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 0.5 | % | ISO 294-4, 2577 |

| Mechanical Properties | Value | Unit | Test Standard |
|---|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 4600 | MPa | ISO 527 |
| Stress at Break | 75 | MPa | ISO 527 |
| Strain at Break | 4.2 | % | ISO 527 |
| Impact Strength (Charpy), +23°C | 45 | kJ/m ² | ISO 179/1eU |
| Impact Strength (Charpy), -30°C | 50 | 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 |
| Puncture - maximum force, +23°C | 437 | N | ISO 6603-2 |
| Puncture energy, +23°C | 1.3 | J | ISO 6603-2 |

| 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) | 105 | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 135 | °C | ISO 75-1/-2 |
| Coeff. of Linear Therm. Expansion, parallel | 50 | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal | 80 | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at 1.5 mm Nom. Thickn. | HB | class | UL 94 |
| Thickness tested | 1.5 | mm | - |

| Electrical Properties | Value | Unit | Test Standard |
|------------------------------|-------|-------|---------------|
| ISO Data | | | |
| Relative permittivity, 100Hz | 3.5 | - | IEC 62631-2-1 |
| Relative permittivity, 1MHz | 3.4 | - | IEC 62631-2-1 |
| Dissipation Factor, 100Hz | 10 | E-4 | IEC 62631-2-1 |
| Dissipation Factor, 1MHz | 130 | 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 | 34 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 200 | - | IEC 60112 |

| Other Properties | Value | Unit | Test Standard |
|---------------------|-------|-------------------|----------------|
| ISO Data | | | |
| Water Absorption | 0.4 | % | Sim. to ISO 62 |
| Humidity absorption | 0.1 | % | Sim. to ISO 62 |
| Density | 1350 | kg/m ³ | 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 | 250 - 260 | °C | - |

Mold temperature

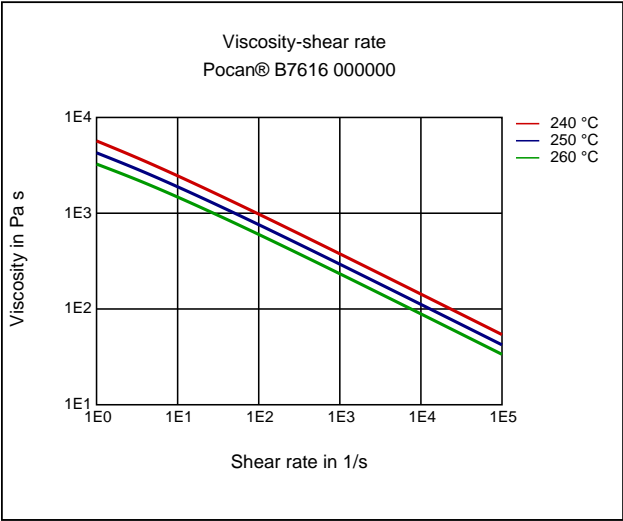
80 - 100

°C

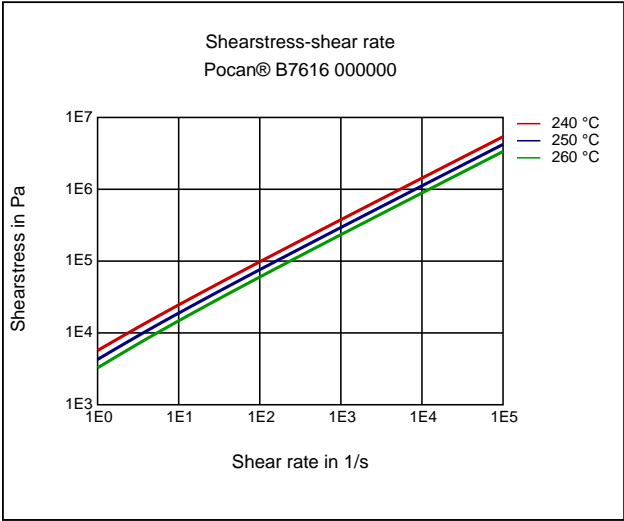
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Diagrams

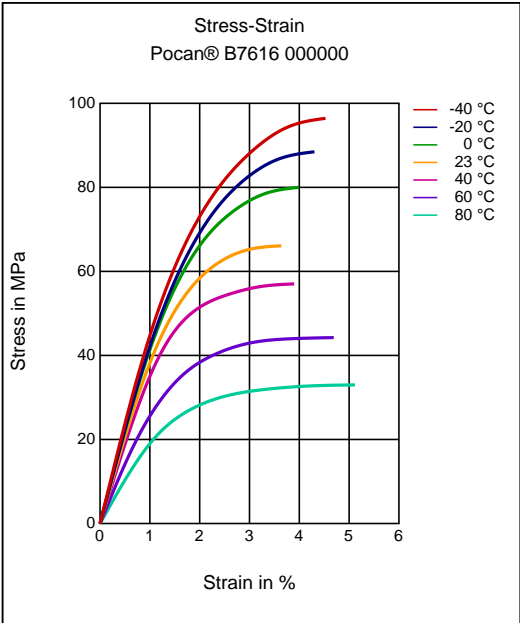
Viscosity-shear rate



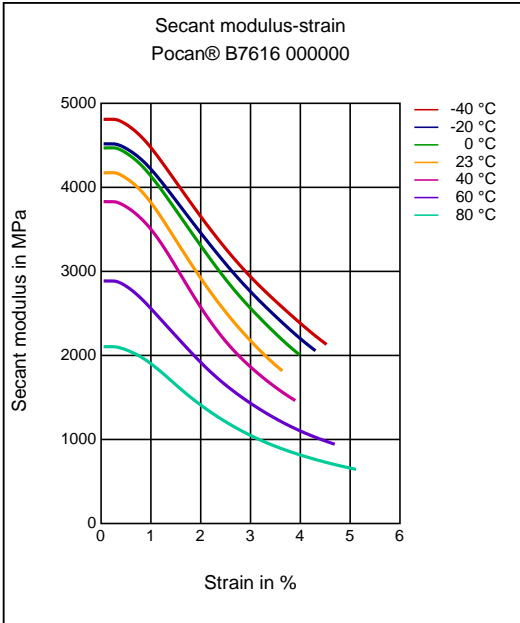
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Characteristics

Processing
Injection Molding

Delivery form
Pellets

Injection Molding
PREPROCESSING

Special Characteristics
Heat aging stabilized

Features
Low Warpage

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 - 260 °C

Mold temperature: 80 - 100 °C

Disclaimer

Liability Exclusion

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