

Product Texts

Injection Molding, 30% Glass Reinforced, General purpose

ISO 1043 PBT-GF30

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|-------|------------------------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 17 | cm ³ /10min | ISO 1133 |
| Temperature | 260 | °C | - |
| Load | 2.16 | kg | - |
| ^[C] Molding shrinkage, parallel | 0.4 | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 1.1 | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 9800 | MPa | ISO 527 |
| ^[C] Stress at break | 140 | MPa | ISO 527 |
| ^[C] Strain at break | 2.9 | % | ISO 527 |
| ^[C] Tensile creep modulus, 1h | 9800 | MPa | ISO 899-1 |
| ^[C] Tensile creep modulus, 1000h | 8900 | MPa | ISO 899-1 |
| ^[C] Charpy impact strength, +23°C | 65 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 60 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 10 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 10 | kJ/m ² | ISO 179/1eA |
| ^[C] Puncture energy, +23°C | 2.3 | J | ISO 6603-2 |
| ^[C] Puncture energy, -30°C | 2.5 | J | ISO 6603-2 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|--|-------|--------|----------------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 225 | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 210 | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 220 | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 30 | E-6/K | ISO 11359-1/-2 |
| ^[C] Coeff. of linear therm. expansion, normal | 110 | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | HB | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| ^[C] Burning rate, FMVSS, Thickness 1 mm | 46.2 | mm/min | ISO 3795 (FMVSS 302) |
| ^[C] Oxygen index | 20 | % | ISO 4589-1/-2 |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|-------|-------|---------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 4 | - | IEC 62631-2-1 |
| ^[C] Relative permittivity, 1MHz | 3.8 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 30 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 180 | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | >1E13 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 29 | kV/mm | IEC 60243-1 |
| ^[C] Comparative tracking index | 375 | - | IEC 60112 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|------------------------------------|-------|-------------------|----------------|
| ^[C] Water absorption | 0.4 | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.1 | % | Sim. to ISO 62 |
| ^[C] Density | 1550 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

Pocan® B3235

PBT-GF30

Envalior

| Material specific properties | Value | Unit | Test Standard |
|---------------------------------|-------|--------------------|---------------------|
| ISO Data | | | |
| ^[C] Viscosity number | 95 | cm ³ /g | ISO 307, 1157, 1628 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] Injection Molding, melt temperature | 260 | °C | ISO 294 |
| Injection Molding, mold temperature | 80 | °C | ISO 294 |

[C]: CAMPUS

| 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 | - |

Characteristics**Processing**

Injection Molding

Applications

General Purpose

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific

Other text information**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