

Pocan® DP BFN 4230 000000

(PBT+PET)-GF30

Envalior

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|--------------|-------------------|----------------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 0.2 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 0.7 | % | ISO 294-4, 2577 |
| Mechanical properties | | | |
| ISO Data | | | |
| Tensile Modulus | 10500 | MPa | ISO 527 |
| Stress at break | 110 | MPa | ISO 527 |
| Strain at break | 2.4 | % | ISO 527 |
| Flexural modulus, 23°C | 10000 | MPa | ISO 178 |
| Flexural strength | 170 | MPa | ISO 178 |
| Charpy impact strength, +23°C | 45 | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | 35 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 10 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 10 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | 40 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 10 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 10 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |
| Ball indentation hardness | 168 | MPa | ISO 2039-1 |
| Thermal properties | | | |
| ISO Data | | | |
| Melting temperature, 10°C/min | 220 | °C | ISO 11357-1/-3 |
| Temp. of deflection under load, 1.80 MPa | 190 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 220 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 200 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 30 | 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. | V-0 | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| Burning behav. at thickness h | V-0 | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | - |
| Oxygen index | 29 | % | ISO 4589-1/-2 |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (1) | 0.8 | mm | - |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (2) | 1.5 | mm | - |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (3) | 3 | mm | - |
| Glow Wire Ignition Temperature (GWIT) | 775 | °C | IEC 60695-2-13 |
| GWIT - thickness tested (1) | 0.75 | mm | - |
| Glow Wire Ignition Temperature (GWIT) | 775 | °C | IEC 60695-2-13 |
| GWIT - thickness tested (2) | 1.5 | mm | - |
| Glow Wire Ignition Temperature (GWIT) | 800 | °C | IEC 60695-2-13 |
| GWIT - thickness tested (3) | 3 | mm | - |
| Electrical properties | | | |
| ISO Data | | | |
| Relative permittivity, 100Hz | 4.6 | - | IEC 62631-2-1 |
| Relative permittivity, 1MHz | 4.2 | - | IEC 62631-2-1 |
| Dissipation factor, 100Hz | 512 | E-4 | IEC 62631-2-1 |
| Dissipation factor, 1MHz | 140 | E-4 | IEC 62631-2-1 |
| Volume resistivity | 1E12 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| Electric strength | 30 | kV/mm | IEC 60243-1 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------------|-------------------|----------------|
| Water absorption | 0.1 | % | Sim. to ISO 62 |
| Density | 1610 | kg/m ³ | ISO 1183 |
| Bulk density | 618 | kg/m ³ | - |

| 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 | - |
| Maximum residence time | <5 | min | - |

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Halogen-free