

Datasheet

Pocan ECOT7142 901510

PET+PBT, 40% glass fibers/mineral, injection molding, high thermal dimension stability

ISO Shortname: ISO 20028-PET+PBT,(GF+MD)40 REC,GMR,09-120

| Property | Test Condition | Unit | Standard | guide value ¹ |
|---|---------------------------------------|-------------------|----------------|--------------------------|
| Rheological properties | | | | |
| C Molding shrinkage, parallel | 60x60x2; 280°C / WZ 110°C; 600 bar | % | ISO 294-4 | 0.2 |
| C Molding shrinkage, transverse | 60x60x2; 280°C / WZ 110°C; 600 bar | % | ISO 294-4 | 0.8 |
| Post- shrinkage, parallel | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.1 |
| Post- shrinkage, transverse | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.1 |
| Mechanical properties (23 °C/50 % r. h.) | | | | |
| C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 12000 |
| C Tensile Stress at break | 5 mm/min | MPa | ISO 527-1,-2 | 125 |
| C Tensile Strain at break | 5 mm/min | % | ISO 527-1,-2 | 1.6 |
| Izod impact strength | 23 °C | kJ/m ² | ISO 180-1U | 35 |
| Izod notched impact strength | 23 °C | kJ/m ² | ISO 180-1A | <10 |
| Flexural modulus | 2 mm/min | MPa | ISO 178-A | 12000 |
| Flexural strength | 2 mm/min | MPa | ISO 178-A | 180 |
| Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 1.8 |
| Thermal properties | | | | |
| C Melting temperature | 10 °C/min | °C | ISO 11357-1,-3 | 260 |
| C Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 205 |
| C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 250 |
| Vicat softening temperature | 50 N; 120 °C/h | °C | ISO 306 | 220 |
| Glow wire test (GWFI) | 0.75 mm | °C | IEC 60695-2-12 | 750 |
| Glow wire test (GWFI) | 1.5 mm | °C | IEC 60695-2-12 | 750 |
| Glow wire test (GWFI) | 3.0 mm | °C | IEC 60695-2-12 | 750 |
| Glow wire test (GWIT) | 0.75 mm | °C | IEC 60695-2-13 | 775 |
| Glow wire test (GWIT) | 1.5 mm | °C | IEC 60695-2-13 | 775 |
| Glow wire test (GWIT) | 3.0 mm | °C | IEC 60695-2-13 | 775 |
| Other properties (23 °C) | | | | |
| C Density | | kg/m ³ | ISO 1183 | 1680 |
| Processing conditions for test specimens | | | | |
| C Injection molding-Melt temperature | | °C | ISO 294 | 280 |
| C Injection molding-Mold temperature | | °C | ISO 294 | 110 |
| Processing recommendations | | | | |
| Drying temperature circulating air dryer | | °C | - | 120 |
| Drying time circulating air dryer | | h | - | 4-8 |

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|--------------------------------|----------------|------|----------------------|--------------------------|
| Residual moisture content | | % | Acc. to Karl Fischer | 0.00-0.02 |
| Melt temperature (Tmin - Tmax) | | °C | - | 270-290 |
| Mold temperature | | °C | - | 100-130 |

Notes

1 Typical properties: these are not to be construed as specifications

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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