

Datasheet

Pocan B1205XHR 000000

PBT, non-reinforced, injection molding, hydrolysis stabilized

ISO Shortname: ISO 20028-PBT,,GHMRW,09-020

| Property | Test Condition | Unit | Standard | guide value ¹ |
|---|----------------------|---------------------------|----------------|--------------------------|
| Rheological properties | | | | |
| C Melt volume-flow rate | 260 °C; 2.16 kg | cm ³ /(10 min) | ISO 1133-1 | 60 |
| C Molding shrinkage, parallel | 60x60x2; 600 bar | % | ISO 294-4 | 2.2 |
| C Molding shrinkage, transverse | 60x60x2; 600 bar | % | ISO 294-4 | 2.2 |
| Post- shrinkage, parallel | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.3 |
| Post- shrinkage, transverse | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.3 |
| Mechanical properties (23 °C/50 % r. h.) | | | | |
| C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 2100 |
| C Yield stress | 50 mm/min | MPa | ISO 527-1,-2 | 50 |
| C Yield strain | 50 mm/min | % | ISO 527-1,-2 | 5 |
| C Nominal strain at break | 50 mm/min | % | ISO 527-1,-2 | 15 |
| C Charpy impact strength | 23 °C | kJ/m ² | ISO 179-1eU | 140 |
| C Charpy impact strength | -30 °C | kJ/m ² | ISO 179-1eU | 80 |
| C Charpy notched impact strength | 23 °C | kJ/m ² | ISO 179-1eA | <10 |
| C Charpy notched impact strength | -30 °C | kJ/m ² | ISO 179-1eA | <10 |
| Izod impact strength | 23 °C | kJ/m ² | ISO 180-1U | 100 |
| Izod notched impact strength | 23 °C | kJ/m ² | ISO 180-1A | <10 |
| Flexural modulus | 2 mm/min | MPa | ISO 178-A | 2200 |
| Flexural strength | 2 mm/min | MPa | ISO 178-A | 75 |
| Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 6.7 |
| Flexural stress at 3.5 % strain | 2 mm/min | MPa | ISO 178-A | 65 |
| Thermal properties | | | | |
| C Melting temperature | 10 °C/min | °C | ISO 11357-1,-3 | 225 |
| C Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 60 |
| C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 140 |
| Vicat softening temperature | 50 N; 120 °C/h | °C | ISO 306 | 170 |
| C Coefficient of linear thermal expansion, parallel | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 1.3 |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 1.3 |
| Electrical properties (23 °C/50 % r. h.) | | | | |
| C Comparative tracking index CTI | Solution A | Rating | IEC 60112 | 600 |
| Other properties (23 °C) | | | | |
| C Density | | kg/m ³ | ISO 1183 | 1290 |
| Bulk density | | kg/m ³ | ISO 60 | 720 |
| Processing conditions for test specimens | | | | |
| C Injection molding-Melt temperature | | °C | ISO 294 | 250 |

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|--|----------------|------|----------------------|--------------------------|
| C Injection molding-Mold temperature | | °C | ISO 294 | 80 |
| Processing recommendations | | | | |
| Drying temperature circulating air dryer | | °C | - | 120 |
| Drying time circulating air dryer | | h | - | 4-8 |
| Residual moisture content | | % | Acc. to Karl Fischer | 0.00-0.02 |
| Melt temperature (Tmin - Tmax) | | °C | - | 250-260 |
| Mold temperature | | °C | - | 80-100 |

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.

Flammability

Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.

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