

# Datasheet

## Pocan ECOB3233HRLT 904040

PBT, 30% glass fibers, injection molding, improved laser-transparency, improved weldability, hydrolysis stabilized, NIR-laser transparent coloring (black)

ISO Shortname: ISO 20028-PBT,GF30 REC,GHMRW,09-100

| Property  | Test Condition       | Unit                | Standard             | guide value <sup>1</sup> |
|---|----------------------|---------------------|----------------------|--------------------------|
| <b>Rheological properties</b>                         |                      |                     |                      |                          |
| C Molding shrinkage, parallel                         | 60x60x2              | %                   | ISO 294-4            | 0.3                      |
| C Molding shrinkage, transverse                       | 60x60x2              | %                   | ISO 294-4            | 0.8                      |
| Post- shrinkage, parallel                             | 60x60x2; 120 °C; 4 h | %                   | ISO 294-4            | 0.05                     |
| Post- shrinkage, transverse                           | 60x60x2; 120 °C; 4 h | %                   | ISO 294-4            | 0.2                      |
| <b>Mechanical properties (23 °C/50 % r. h.)</b>       |                      |                     |                      |                          |
| C Tensile modulus                                     | 1 mm/min             | MPa                 | ISO 527-1,-2         | 10000                    |
| C Tensile Stress at break                             | 5 mm/min             | MPa                 | ISO 527-1,-2         | 140                      |
| C Tensile Strain at break                             | 5 mm/min             | %                   | ISO 527-1,-2         | 2.8                      |
| C Charpy impact strength                              | 23 °C                | kJ/m <sup>2</sup>   | ISO 179-1eU          | 60                       |
| Izod impact strength                                  | 23 °C                | kJ/m <sup>2</sup>   | ISO 180-1U           | 53                       |
| Flexural modulus                                      | 2 mm/min             | MPa                 | ISO 178-A            | 9600                     |
| Flexural strength                                     | 2 mm/min             | MPa                 | ISO 178-A            | 230                      |
| Flexural strain at flexural strength                  | 2 mm/min             | %                   | ISO 178-A            | 3.2                      |
| <b>Thermal properties</b>                             |                      |                     |                      |                          |
| 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          | 190                      |
| C Temperature of deflection under load                | 0.45 MPa             | °C                  | ISO 75-1,-2          | 215                      |
| C Coefficient of linear thermal expansion, parallel   | 23 to 55 °C          | 10 <sup>-4</sup> /K | ISO 11359-1,-2       | 0.2                      |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C          | 10 <sup>-4</sup> /K | ISO 11359-1,-2       | 1.0                      |
| C Vicat softening temperature                         | 50 N; 50 °C/h        | °C                  | ISO 306              | 200                      |
| <b>Electrical properties (23 °C/50 % r. h.)</b>       |                      |                     |                      |                          |
| C Comparative tracking index CTI                      | Solution A           | Rating              | IEC 60112            | 275                      |
| <b>Other properties (23 °C)</b>                       |                      |                     |                      |                          |
| C Density   |                      | kg/m <sup>3</sup>   | ISO 1183             | 1520                     |
| Bulk density  |                      | kg/m <sup>3</sup>   | ISO 60               | 700                      |
| <b>Processing conditions for test specimens</b>       |                      |                     |                      |                          |
| C Injection molding-Melt temperature                  |                      | °C                  | ISO 294              | 260                      |
| C Injection molding-Mold temperature                  |                      | °C                  | ISO 294              | 80                       |
| <b>Processing recommendations</b>                     |                      |                     |                      |                          |
| 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                |

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| Property                       | Test Condition | Unit | Standard | guide value <sup>1</sup> |
|--------------------------------|----------------|------|----------|--------------------------|
| Melt temperature (Tmin - Tmax) |                | °C   | -        | 250-270                  |
| Mold temperature               |                | °C   | -        | 60-100                   |

#### 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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