

Durethan BKV50GH2.0EF 900051

PA 6, 50 % glass fibers, injection molding, improved flowability, heat-aging stabilized, improved surface finish

ISO Shortname: ISO 16396-PA 6,GF50,GHR,S10-160

| Property | Test Condition | Unit | Standard | guide value d.a.m. | cond. |
|---|-------------------------------------|---------------------|----------------------|-----------------------|-------|
| Rheological properties | | | | | |
| C Molding shrinkage, parallel | 60x60x2; 280 °C / MT 80 °C; 600 bar | % | ISO 294-4 | 0.15 | |
| C Molding shrinkage, transverse | 60x60x2; 280 °C / MT 80 °C; 600 bar | % | ISO 294-4 | 0.5 | |
| Post- shrinkage, parallel | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.07 | |
| Post- shrinkage, transverse | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.13 | |
| Mechanical properties (23 °C/50 % r. h.) | | | | | |
| C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 16500 | 11500 |
| C Tensile Stress at break | 5 mm/min | MPa | ISO 527-1,-2 | 220 | 150 |
| C Tensile Strain at break | 5 mm/min | % | ISO 527-1,-2 | 3 | 4.5 |
| C Charpy notched impact strength | 23 °C | kJ/m ² | ISO 179-1eA | 15 | 17 |
| C Charpy notched impact strength | -30 °C | kJ/m ² | ISO 179-1eA | 13 | 12 |
| Izod impact strength | 23 °C | kJ/m ² | ISO 180-1U | 90 | 85 |
| Izod impact strength | -30 °C | kJ/m ² | ISO 180-1U | 90 | |
| Izod notched impact strength | 23 °C | kJ/m ² | ISO 180-1A | 15 | 18 |
| Izod notched impact strength | -30 °C | kJ/m ² | ISO 180-1A | 15 | 13 |
| Flexural modulus | 2 mm/min | MPa | ISO 178-A | 15500 | 11000 |
| Flexural strength | 2 mm/min | MPa | ISO 178-A | 340 | 230 |
| Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 3 | 4 |
| Flexural stress at 3.5 % strain | 2 mm/min | MPa | ISO 178-A | | 220 |
| Thermal properties | | | | | |
| C Melting temperature | 10 °C/min | °C | ISO 11357-1,-3 | 220 | |
| C Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 204 | |
| C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 219 | |
| C Coefficient of linear thermal expansion, parallel | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 0.151 | |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 0.714 | |
| Other properties (23 °C) | | | | | |
| C Density | | kg/m ³ | ISO 1183 | 1570 | |
| Processing conditions for test specimens | | | | | |
| C Injection molding-Melt temperature | | °C | ISO 294 | 280 | |
| C Injection molding-Mold temperature | | °C | ISO 294 | 80 | |
| Processing recommendations | | | | | |
| Drying temperature dry air dryer | | °C | - | 80 | |
| Drying time dry air dryer | | h | - | 2-6 | |
| Residual moisture content | | % | Acc. to Karl Fischer | 0.03-0.12 | |
| Melt temperature (Tmin - Tmax) | | °C | - | 270-290 | |
| Mold temperature | | °C | - | 80-120 | |

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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