

Durethan BKV130CS 600091

PA 6-Copolymer, 30% glass fibers, injection molding, improved impact strength

ISO Shortname: ISO 16396-PA 6/66-I,GF30,GR,S14-090

| Property | Test Condition | Unit | Standard | guide value ¹ d.a.m. cond. |
|---|----------------|---------------------|----------------------|--|
| Mechanical properties (23 °C/50 % r. h.) | | | | |
| C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 9500 |
| 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 | 3.3 |
| C Charpy impact strength | 23 °C | kJ/m ² | ISO 179-1eU | 65 |
| C Charpy impact strength | -30 °C | kJ/m ² | ISO 179-1eU | 10 |
| C Charpy notched impact strength | 23 °C | kJ/m ² | ISO 179-1eA | <10 |
| Izod impact strength | 23 °C | kJ/m ² | ISO 180-1U | 65 |
| Izod impact strength | -30 °C | kJ/m ² | ISO 180-1U | 65 |
| Izod notched impact strength | 23 °C | kJ/m ² | ISO 180-1A | 12 |
| Izod notched impact strength | -30 °C | kJ/m ² | ISO 180-1A | <10 |
| Flexural modulus | 2 mm/min | MPa | ISO 178-A | 8500 |
| Flexural strength | 2 mm/min | MPa | ISO 178-A | 220 |
| Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 3.5 |
| 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 | 213 |
| C Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 200 |
| C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 210 |
| C Coefficient of linear thermal expansion, parallel | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 0.2 |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 1.1 |
| C Burning behavior UL 94 | 1.5 mm | Class | UL 94 | HB |
| C Burning behavior UL 94 | 0.75 mm | Class | UL 94 | HB |
| Other properties (23 °C) | | | | |
| C Water absorption (Saturation value) | Water at 23 °C | % | ISO 62 | 7 |
| C Water absorption (Equilibrium value) | 23 °C; 50 % RH | % | ISO 62 | 2 |
| C Density | | kg/m ³ | ISO 1183 | 1360 |
| Bulk density | | kg/m ³ | ISO 60 | 600 |
| 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 | - | 260-290 |
| Mold temperature | | °C | - | 80-100 |

Notes



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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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