

Datasheet

Durethan BKV315Z 000000 DUS037

PA 6, 15% glass fibers, injection molding, improved impact strength

ISO Shortname: ISO 16396-PA 6-I,GF15,BHR,S14-050

| Property | Test Condition | Unit | Standard | guide value ¹ | |
|---|----------------|-------------------|----------------|--------------------------|-------|
| | | | | d.a.m. | cond. |
| Rheological properties | | | | | |
| C Molding shrinkage, parallel | 60x60x2 | % | ISO 294-4 | 1.3 | |
| C Molding shrinkage, transverse | 60x60x2 | % | ISO 294-4 | 0.7 | |
| Post- shrinkage, parallel | 60x60x2 | % | ISO 294-4 | 0.2 | |
| Post- shrinkage, transverse | 60x60x2 | % | ISO 294-4 | 0.1 | |
| Mechanical properties (23 °C/50 % r. h.) | | | | | |
| C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 5500 | 2600 |
| C Tensile Stress at break | 5 mm/min | MPa | ISO 527-1,-2 | 105 | 55 |
| C Tensile Strain at break | 5 mm/min | % | ISO 527-1,-2 | 5.5 | 14 |
| C Charpy impact strength | 23 °C | kJ/m ² | ISO 179-1eU | 80 | 130 |
| C Charpy impact strength | -30 °C | kJ/m ² | ISO 179-1eU | 90 | 90 |
| C Charpy notched impact strength | 23 °C | kJ/m ² | ISO 179-1eA | 20 | 35 |
| C Charpy notched impact strength | -30 °C | kJ/m ² | ISO 179-1eA | <10 | <10 |
| Izod impact strength | 23 °C | kJ/m ² | ISO 180-1U | 65 | 110 |
| Izod impact strength | -30 °C | kJ/m ² | ISO 180-1U | 75 | 70 |
| Izod notched impact strength | 23 °C | kJ/m ² | ISO 180-1A | 20 | 40 |
| Izod notched impact strength | -30 °C | kJ/m ² | ISO 180-1A | <10 | <10 |
| Flexural modulus | 2 mm/min | MPa | ISO 178-A | 5000 | 2300 |
| Flexural strength | 2 mm/min | MPa | ISO 178-A | 165 | 80 |
| Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 5.5 | 7 |
| Flexural stress at 3.5 % strain | 2 mm/min | MPa | ISO 178-A | 150 | 60 |
| 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 | 170 | |
| C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 209 | |
| Vicat softening temperature | 50 N; 120 °C/h | °C | ISO 306 | 202 | |
| Other properties (23 °C) | | | | | |
| C Density | | kg/m ³ | ISO 1183 | 1200 | |
| 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 | |

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|--------------------------------|----------------|------|----------------------|---|
| Drying time dry air dryer | | h | - | 2-6 |
| Residual moisture content | | % | Acc. to Karl Fischer | 0.00-0.06 |
| Melt temperature (Tmin - Tmax) | | °C | - | 270-290 |
| Mold temperature | | °C | - | 80-120 |

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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