

## Data sheet

### Durethan BKV55XF 900116

PA 6, 55 % glass fibers, injection molding, improved flowability, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,GF55,GHR,S10-190

| 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            | 0.2         |       |
| 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            | 0.1         |       |
| Post- shrinkage, transverse                           | 60x60x2; 120 °C; 4 h                | %      | ISO 294-4            | 0.1         |       |
| Mechanical properties (23 °C/50 % r. h.)              |                                     |        |                      |             |       |
| C Tensile modulus                                     | 1 mm/min                            | MPa    | ISO 527-1,-2         | 17300       | 10500 |
| C Tensile Stress at break                             | 5 mm/min                            | MPa    | ISO 527-1,-2         | 215         | 140   |
| C Tensile Strain at break                             | 5 mm/min                            | %      | ISO 527-1,-2         | 2.5         | 3.5   |
| C Charpy impact strength                              | 23 °C                               | kJ/m²  | ISO 179-1eU          | 90          | 85    |
| C Charpy notched impact strength                      | 23 °C                               | kJ/m²  | ISO 179-1eA          | 15          | 20    |
| Izod impact strength                                  | 23 °C                               | kJ/m²  | ISO 180-1U           | 90          | 85    |
| Izod notched impact strength                          | 23 °C                               | kJ/m²  | ISO 180-1A           | 15          | 20    |
| Izod notched impact strength                          | -30 °C                              | kJ/m²  | ISO 180-1A           | 15          | 20    |
| Flexural modulus                                      | 2 mm/min                            | MPa    | ISO 178-A            | 16500       | 11000 |
| Flexural strength                                     | 2 mm/min                            | MPa    | ISO 178-A            | 330         | 210   |
| Flexural strain at flexural strength                  | 2 mm/min                            | %      | ISO 178-A            | 3           | 3.5   |
| Flexural stress at 3.5 % strain                       | 2 mm/min                            | MPa    | ISO 178-A            |             | 210   |
| Thermal properties                                    |                                     |        |                      |             |       |
| C Melting temperature                                 | 10 °C/min                           | °C     | ISO 11357-1,-3       | 221         |       |
| C Temperature of deflection under load                | 1.80 MPa                            | °C     | ISO 75-1,-2          | 208         |       |
| C Temperature of deflection under load                | 0.45 MPa                            | °C     | ISO 75-1,-2          | 218         |       |
| C Coefficient of linear thermal expansion, parallel   | 23 to 55 °C                         | 10-4/K | ISO 11359-1,-2       | 0.12        |       |
| C Coefficient of linear thermal expansion, transverse | 23 to 55 °C                         | 10-4/K | ISO 11359-1,-2       | 0.9         |       |
| Other properties (23 °C)                              |                                     |        |                      |             |       |
| C Density                                             |                                     | kg/m³  | ISO 1183             | 1620        |       |
| 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 | 0.05-0.15   |       |
| 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.

## Disclaimer

### Standard Disclaimer

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### Typical Properties

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.

### Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling LANXESS products

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**Color and Visual Effects**

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.

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