# Durethan BKV60XF 900116

### PA 6, 60% glass fibers, injection molding, improved flowability, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,GF60,GHR,S10-220

Property	Test Condition	Unit	Standard	guide value <sup>1</sup>					
Rheological properties									
C Molding shrinkage, parallel	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.25					
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.52					
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.05					
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.07					
Mechanical properties (23 °C/50 % r. h.)									
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	20200	13000				
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	2.3	2.8				
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	88					
C Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	15					
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	80	75				
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	80					
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	15					
Flexural modulus	2 mm/min	MPa	ISO 178-A	18500	14000				
Flexural strength	2 mm/min	MPa	ISO 178-A	350	230				
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	2.6	2.8				
C Puncture maximum force	23 °C	N	ISO 6603-2	1100					
C Puncture maximum force	-30 °C	N	ISO 6603-2	950					
C Puncture energy	23 °C	J	ISO 6603-2	4.2					
C Puncture energy	-30 °C	J	ISO 6603-2	3.4					
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	217					
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-₄</sup> /K	ISO 11359-1,-2	0.11					
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.85					
Other properties (23 °C)									
C Density		kg/m³	ISO 1183	1693					
Bulk density		kg/m³	ISO 60	760					
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					





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Property	Test Condition	Unit	Standard	guide value <sup>1</sup>	
Mold temperature		°C	-	d.a.m. cond. 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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#### 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.

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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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