Datasheet

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 [1] d.a.m.	guide value [1] cond.
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^{-4}/K	ISO 11359-1,-2	0.11	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10^{-4}/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	

Edition 20.12.2023

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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	

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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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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Edition 20.12.2023