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

Datasheet

Durethan BKV60XF 900116

Property	Test Condition	Unit	Standard	guide value [1] d.a.m.	guide value [1] cond.
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.

Datasheet
Durethan BKV60XF 900116

Disclaimer

Disclaimer for commercial products

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Test values

Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the coloring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.

Conditioning

Conditioning in accordance with ISO 1110 (70 °C; 62 % r.h.)