Envalior
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Datasheet
Durethan BKV30XTS1 901510

PA 6, 30% glass fibers, injection molding, heat-aging stabilized, high temperature stabilized

ISO Shortname: ISO 16396-PA 6,GF30,GHR,S14-100

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	0.63	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.05	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.14	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	9500	5300
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	170	85
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3	6
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	60	
C Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	10	
C Charpy notched impact strength	-30 °C	kJ/m²	ISO 179-1eA	9	
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	50	70
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	10	15
Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	9	
Flexural modulus	2 mm/min	MPa	ISO 178-A	9400	5200
Flexural strength	2 mm/min	MPa	ISO 178-A	250	140
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	3	5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A		120
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	200	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	215	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	0.19	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	1.08	
Other properties (23 °C)					
C Density		kg/m³	ISO 1183	1360	
Bulk density		kg/m³	ISO 60	700	
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	0.03-0.12	
Melt temperature (Tmin - Tmax)		°C	-	270-290	
admissible residence time at Tmax		min	-	<5	
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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