

# Datasheet

## Durethan BKV35XTS1 901510

PA 6, 35% glass fibers, injection molding, heat-aging stabilized, high temperature stabilized

ISO Shortname: ISO 16396-PA 6,GF35,GHR,S14-110

Property	Test Condition	Unit	Standard	guide value <sup>1</sup>	
				d.a.m.	cond.
<b>Rheological properties</b>					
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	0.75	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.10	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.25	
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	10700	6500
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	180	100
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3	5
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	70	80
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	60	55
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	12	20
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	<10
Izod impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1U	70	75
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	55	60
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	12	20
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	<10	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	10500	6500
Flexural strength	2 mm/min	MPa	ISO 178-A	275	160
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	3.4	4.5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A		140
<b>Thermal properties</b>					
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	205	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.17	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	1	
<b>Other properties (23 °C)</b>					
C Density		kg/m <sup>3</sup>	ISO 1183	1410	
Bulk density		kg/m <sup>3</sup>	ISO 60	700	
<b>Processing conditions for test specimens</b>					
C Injection molding-Melt temperature		°C	ISO 294	280	
C Injection molding-Mold temperature		°C	ISO 294	80	

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				d.a.m.	cond.
<b>Processing recommendations</b>					
Drying temperature dry air dryer		°C	-		80
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	-		80-100

### 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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