

# Datasheet

## Durethan BKV25 000000

PA 6, 25% glass fibers, injection molding

ISO Shortname: ISO 16396-PA 6,GF25,GR,S14-080

Property	Test Condition	Unit	Standard	guide value <sup>1</sup>	
				d.a.m.	cond.
<b>Rheological properties</b>					
Molding shrinkage, parallel	150x105x3; 280 °C / MT 80 °C; 500 bar	%	acc. ISO 294-4	0.21	
Molding shrinkage, transverse	150x105x3; 280 °C / MT 80 °C; 500 bar	%	acc. ISO 294-4	0.88	
Post- shrinkage, parallel	150x105x3; 120 °C; 4 h	%	acc. ISO 294-4	0.04	
Post- shrinkage, transverse	150x105x3; 120 °C; 4 h	%	acc. ISO 294-4	0.14	
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	8400	5100
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	160	90
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3	6
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	60	80
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	10
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	<10
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	7200	4200
Flexural strength	2 mm/min	MPa	ISO 178-A	250	145
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5	6
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	230	120
<b>Thermal properties</b>					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	222	
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 <sup>-4</sup> /K	ISO 11359-1,-2	0.3	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.9	
<b>Other properties (23 °C)</b>					
C Density		kg/m <sup>3</sup>	ISO 1183	1320	
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	
<b>Processing recommendations</b>					
Drying temperature dry air dryer		°C	-	80	
Drying time dry air dryer		h	-	2-6	

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Residual moisture content		%	Acc. to Karl Fischer	0.03-0.12
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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