

**Durethan BKV30H2.0 000000**

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

ISO/ ASTM

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

Property	Test Condition	Unit	Standard	guide value	
				d.a.m.	cond.
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	9600	5900
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	170	100
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3.5	6.5
C Tensile creep modulus	1000 h	MPa	ISO 899-1		4100
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	80	95
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	70	70
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	15	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	75	80
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	65	65
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	15	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	8500	5100
Flexural strength	2 mm/min	MPa	ISO 178-A	280	170
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.0	6.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	265	140
<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 Temperature of deflection under load	8.00 MPa	°C	ISO 75-1,-2	~110	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	> 200	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.2	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.8	
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB	
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB	
Burning behavior US-FMVSS302	>=1.0 mm		ISO 3795	passed	
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	> 200	
<b>Other properties (23 °C)</b>					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	7.0	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	2.1	
C Density		kg/m <sup>3</sup>	ISO 1183	1360	
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	
Residual moisture content		%	Acc. to Karl Fischer	0.03-0.12	
Melt temperature (Tmin - Tmax)		°C	-	270-290	
Mold temperature		°C	-	80-120	

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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### Color and Visual Effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.

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