

# Datasheet

## Durethan BKV35H2.0LT 904040

PA 6, 35% glass fibers, injection molding, heat-aging stabilized, NIR-laser transparent coloring (black)

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>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	11000	6800
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	190	120
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	85	95
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	75	75
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	15	22
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	80	90
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	70	65
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	15	22
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	10700	5900
Flexural strength	2 mm/min	MPa	ISO 178-A	290	180
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4	5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	285	160
<b>Thermal properties</b>					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	220	
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	205	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	215	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	>200	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.2	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.8	
<b>Other properties (23 °C)</b>					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	6.5	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	1.9	
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	
<b>Processing recommendations</b>					
Drying temperature dry air dryer		°C	-	80	
Drying time dry air dryer		h	-	2-6	

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Property	Test Condition	Unit	Standard	guide value <sup>1</sup> <small>d.a.m. cond.</small>
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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Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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