

Datasheet

Durethan BKV20GH3.0 000000

PA 6, 20% glass fibers, injection molding, heat-aging stabilized, weather stabilized, improved surface finish

ISO Shortname: ISO 16396-PA 6,GF20,GHR,S14-080

Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.3	
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.7	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.2	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	7600	4700
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	150	100
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3	7
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	45	60
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	40	40
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	<10	<10
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	<10	<10
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	30	45
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	30	30
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	<10	< 10
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	<10	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	6400	4100
Flexural strength	2 mm/min	MPa	ISO 178-A	210	130
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4	6.5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	195	110
Thermal properties					
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	195	
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	0.2	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.9	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1280	
Bulk density		kg/m ³	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	

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Processing recommendations					
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

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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