

Datasheet

Durethan BKV220H2.0 901510

PA 6, 20% glass fibers, injection molding, improved impact strength, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6-I,GF20,GHR,S14-060

Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 600 bar	%	ISO 294-4	0.7	
C Molding shrinkage, transverse	60x60x2; 600 bar	%	ISO 294-4	0.6	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	5300	2500
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	85	45
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	4.5	13.5
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	70	95
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	79	76
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	22	35
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	12	11
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	59	85
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	61	
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	22	34
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	12	
Flexural modulus	2 mm/min	MPa	ISO 178-A	4400	2400
Flexural strength	2 mm/min	MPa	ISO 178-A	130	70
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5	7
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	120	60
Thermal properties					
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	175	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	210	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	185	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1210	
Bulk density		kg/m ³	ISO 60	580	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	280	
C Injection molding-Mold temperature		°C	ISO 294	80	
Processing recommendations					
Drying temperature dry air dryer		°C	-	80	

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Property	Test Condition	Unit	Standard	guide value ¹ <small>d.a.m. cond.</small>
Drying time dry air dryer		h	-	2-6
Residual moisture content		%	Acc. to Karl Fischer	0.03-0.12
Melt temperature (Tmin - Tmax)		°C	-	260-290
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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Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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