

Datasheet

Durethan BKV20H2.0EF 900111 DUS001

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

ISO Shortname: ISO 16396-PA 6,GF20,GHR,S12-070

Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 270 °C / WZ 120 °C; 600 bar	%	ISO 294-4	0.30	
C Molding shrinkage, transverse	60x60x2; 270 °C / WZ 120 °C; 600 bar	%	ISO 294-4	0.50	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.10	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.15	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	6700	3500
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	150	80
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3.5	8.0
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	45	85
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	40	
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	<10	15
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	<10	
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	40	70
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	40	
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	<10	15
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	<10	
Flexural modulus	2 mm/min	MPa	ISO 178-A	6900	3600
Flexural strength	2 mm/min	MPa	ISO 178-A	225	135
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.0	6.4
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	210	110
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	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	0.3	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.1	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1266	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	270	
C Injection molding-Mold temperature		°C	ISO 294	80	

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Property	Test Condition	Unit	Standard	guide value ¹ d.a.m. cond.
Processing recommendations				
Drying temperature dry air dryer		°C	-	80
Drying time dry air dryer		h	-	2-6
Melt temperature (Tmin - Tmax)		°C	-	260-280
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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