

Datasheet

Durethan BKV50H3.0EF 000000

PA 6, 50% glass fibers, injection molding, improved flowability, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,GF50,GHR,S10-160

Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	16700	11000
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	220	140
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	2.5	4
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	90	90
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	90	80
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	15	20
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	15	15
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	80	85
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	80	75
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	15	20
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	15	15
Flexural modulus	2 mm/min	MPa	ISO 178-A	17000	11700
Flexural strength	2 mm/min	MPa	ISO 178-A	345	225
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	3	4
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	212	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	220	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1600	
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	
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

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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.

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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