

Data sheet

Durethan BKV60PH2.0EF 900116

PA 6, 60% glass fibers, injection molding, improved flowability, heat-aging stabilized, improved fatigue

ISO Shortname: ISO 16396-PA 6,GF60,GHR,S10-220

Property	Test Condition	Unit	Standard	guide value	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2	%	ISO 294-4	0.35	
C Molding shrinkage, transverse	60x60x2	%	ISO 294-4	0.55	
Post- shrinkage, parallel	60x60x2	%	ISO 294-4	0.05	
Post- shrinkage, transverse	60x60x2	%	ISO 294-4	0.05	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	21000	12900
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	240	155
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	2.7	4.3
Tensile modulus	1 mm/min; 120 °C	MPa	ISO 527-1,-2	9600	
Tensile Stress at break	5 mm/min; 120 °C	MPa	ISO 527-1,-2	115	
Tensile Strain at break	5 mm/min; 120 °C	%	ISO 527-1,-2	5.2	
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	95	95
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	100	85
C Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	17	17
C Charpy notched impact strength	-30 °C	kJ/m²	ISO 179-1eA	15	15
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	85	85
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	20	20
Flexural modulus	2 mm/min	MPa	ISO 178-A	20000	13500
Flexural strength	2 mm/min	MPa	ISO 178-A	390	255
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	2.9	4.1
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A		245
Thermal properties					
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	215	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	220	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	210	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.14	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.68	
Other properties (23 °C)					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	3.6	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	1.3	
C Density		kg/m³	ISO 1183	1700	
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	

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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Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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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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