

Durethan BKV20GH2.0 900051

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

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	0.35	
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.54	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.12	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.19	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	7600	
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	150	
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3.0	
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	
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	35	
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	35	
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	
Flexural strength	2 mm/min	MPa	ISO 178-A	225	
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.5	
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	200	
C Puncture energy	23 °C	J	ISO 6603-2	5	
C Puncture energy	-30 °C	J	ISO 6603-2	4	
Ball indentation hardness		N/mm ²	ISO 2039-1	198	
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	215	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	213	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	> 200	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.23	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.89	
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB	
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB	
Electrical properties (23 °C/50 % r. h.)					
C Relative permittivity	100 Hz	-	IEC 60250	4.1	9.34
C Relative permittivity	1 MHz	-	IEC 60250	3.74	4.27
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	80	2200
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	180	650
C Volume resistivity		Ohm-m	IEC 62631-3	3E13	1E10



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Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
C Surface resistivity		Ohm	IEC 62631-3	2E15	2E13
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	
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.

Flammability

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