

Durethan BKV215W1 902176

PA 6-Copolymer, 15 % glass fibers, injection molding, improved impact strength, weather stabilized

ISO Shortname: ISO 16396-PA 6/66-I,GF15,GLR,S14-040

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	0.5	
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 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	4400	2100
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	85	50
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	4.7	20
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	65	100
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	80	80
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	55	80
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	60	60
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	20	30
Flexural modulus	2 mm/min	MPa	ISO 178-A	3900	1900
Flexural strength	2 mm/min	MPa	ISO 178-A	135	65
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5.5	7.5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	115	50
C Puncture maximum force	23 °C	N	ISO 6603-2	1760	
C Puncture maximum force	-30 °C	N	ISO 6603-2	785	
C Puncture energy	23 °C	J	ISO 6603-2	7.3	
C Puncture energy	-30 °C	J	ISO 6603-2	3.1	
Ball indentation hardness		N/mm ²	ISO 2039-1	110	
Thermal properties					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	214	
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	180	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	205	
C Temperature of deflection under load	8.00 MPa	°C	ISO 75-1,-2	60	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	193	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.5	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.6	
Burning behavior US-FMVSS302	>=1.0 mm		ISO 3795	passed	
Electrical properties (23 °C/50 % r. h.)					
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1180	
Bulk density		kg/m ³	ISO 60	715	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	280	



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Property	Test Condition	Unit	Standard	guide value ¹ d.a.m. cond.
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	-	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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Typical Properties

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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Color and Visual Effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.

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