

Datasheet

Durethan BLUEBKV315ZH2.0 901510

PA 6, 15% glass fibers, blow molding, improved impact strength, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,GF15 (R),BHR,S14-050

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	0.9	
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	0.2	
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	5300	2500
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	105	55
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	5.0	19
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	80	105
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	85	90
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	15	30
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	<10	10
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	65	95
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	70	65
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	15	30
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	10	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	4800	2300
Flexural strength	2 mm/min	MPa	ISO 178-A	165	75
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	150	55
C Puncture maximum force	23 °C	N	ISO 6603-2	1200	
C Puncture maximum force	-30 °C	N	ISO 6603-2	630	
C Puncture energy	23 °C	J	ISO 6603-2	4.9	
C Puncture energy	-30 °C	J	ISO 6603-2	2.5	
Ball indentation hardness		N/mm ²	ISO 2039-1	140	
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	175	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	210	
C Temperature of deflection under load	8.00 MPa	°C	ISO 75-1,-2	58	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.4	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.3	
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB	

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Property	Test Condition	Unit	Standard	guide value ¹ d.a.m. cond. passed
Burning behavior US-FMVSS302	2.0 mm		ISO 3795	
Electrical properties (23 °C/50 % r. h.)				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	375
Other properties (23 °C)				
C Density		kg/m ³	ISO 1183	1204
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	0.0-0.06
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

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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