

# Durethan BM29XH2.0EF 900116

PA 6, 30 % glass fibers/mineral, injection molding, improved flowability, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,(GF+MD)30,GHR,S10-060

Property	Test Condition	Unit	Standard	guide value d.a.m.	cond.
<b>Rheological properties</b>					
C Molding shrinkage, parallel	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.45	
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.65	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.2	
<b>Mechanical properties (23 °C/50 % r. h.)</b>					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	6500	2900
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	110	60
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3	20
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	35	110
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	30	35
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	<10
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	<10
Charpy notched impact strength	-40 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10	<10
Izod impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1U	30	95
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	30	30
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	<10	<10
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	<10	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	6400	3000
Flexural strength	2 mm/min	MPa	ISO 178-A	180	100
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4	7.5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	175	80
Ball indentation hardness		N/mm <sup>2</sup>	ISO 2039-1	190	
<b>Thermal properties</b>					
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	190	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	210	
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	> 200	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.4	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.9	
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB	
<b>Electrical properties (23 °C/50 % r. h.)</b>					
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	425	
<b>Other properties (23 °C)</b>					
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	7	
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	2.2	
C Density		kg/m <sup>3</sup>	ISO 1183	1360	
Bulk density		kg/m <sup>3</sup>	ISO 60	800	



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Property	Test Condition	Unit	Standard	guide value	d.a.m.	cond.
<b>Processing conditions for test specimens</b>						
C Injection molding-Melt temperature		°C	ISO 294	280		
C Injection molding-Mold temperature		°C	ISO 294	80		
<b>Processing recommendations</b>						
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	-	80-100		

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.

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