

Datasheet

Durethan DPAKV30HREF 901510

PA 66, 30% glass fibers, injection molding, improved flowability, heat-aging stabilized, hydrolysis stabilized

ISO Shortname: ISO 16396-PA 66,GF30,GHRW,S14-080

Property	Test Condition	Unit	Standard	guide value ¹	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 290 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.37	
C Molding shrinkage, transverse	60x60x2; 290 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.82	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.06	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.04	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	8200	5000
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	150	100
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3.6	8.0
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	80	80
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	70	
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	70	70
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	65	60
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	10	15
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	<10	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	8100	5000
Flexural strength	2 mm/min	MPa	ISO 178-A	240	150
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.0	6.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	225	125
C Puncture maximum force	23 °C	N	ISO 6603-2	774	
C Puncture maximum force	-30 °C	N	ISO 6603-2	756	
C Puncture energy	23 °C	J	ISO 6603-2	2.7	
C Puncture energy	-30 °C	J	ISO 6603-2	2.5	
Ball indentation hardness		N/mm ²	ISO 2039-1	175	
Thermal properties					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	263	
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	240	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	250	
Burning behavior US-FMVSS302	>=1.0 mm		ISO 3795	passed	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1323	

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Property	Test Condition	Unit	Standard	guide value ¹ d.a.m. cond.
Bulk density		kg/m ³	ISO 60	700
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	290
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	-	280-300
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.

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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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