

Datasheet

Durethan AKV230H2.0 901510

PA 66, 30% glass fibers, injection molding, improved impact strength, heat-aging stabilized

ISO Shortname: ISO 16396-PA 66-I,GF30,GHR,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	0.50	
C Molding shrinkage, transverse	60x60x2; 290 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.85	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.10	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.05	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	8000	5100
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	130	85
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	4.0	6.5
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	75	80
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	85	85
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	20	28
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	15	15
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	65	70
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	85	85
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	20	28
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	15	15
Flexural modulus	2 mm/min	MPa	ISO 178-A	7000	4600
Flexural strength	2 mm/min	MPa	ISO 178-A	200	135
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.5	6.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	190	110
C Puncture maximum force	23 °C	N	ISO 6603-2	1200	1450
C Puncture maximum force	-30 °C	N	ISO 6603-2	950	700
C Puncture energy	23 °C	J	ISO 6603-2	7.0	10
C Puncture energy	-30 °C	J	ISO 6603-2	4.0	2.5
Thermal properties					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	262	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1295	
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	

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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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