

Data sheet

Durethan AKV60XF 900116

PA 66, 60 % glass fibers, injection molding, improved flowability, heat-aging stabilized

ISO Shortname: ISO 16396-PA 66,GF60,GHR,S12-190

Property	Test Condition	Unit	Standard	guide value	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 300 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.35	
C Molding shrinkage, transverse	60x60x2; 300 °C / MT 80 °C; 600 bar	%	ISO 294-4	0.45	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.05	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.10	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	20200	13300
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	210	145
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	1.5	2.7
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	70	60
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	65	55
C Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	13	18
C Charpy notched impact strength	-30 °C	kJ/m²	ISO 179-1eA	11	10
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	70	60
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	65	55
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	14	18
Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	12	12
Flexural modulus	2 mm/min	MPa	ISO 178-A	16400	11800
Flexural strength	2 mm/min	MPa	ISO 178-A	300	205
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	2.6	3.1
Thermal properties					
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	261	
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	250	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.1	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10-4/K	ISO 11359-1,-2	0.7	
Other properties (23 °C)					
C Density		kg/m³	ISO 1183	1680	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	300	
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	0.05-015	
Melt temperature (Tmin - Tmax)		°C	-	280-300	
Mold temperature		°C	-	80-120	

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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