

Durethan AC30 000000 DUS027

PA 66, non-reinforced, injection molding, heat-aging stabilized, improved impact strength

ISO Shortname: ISO 16396-PA 66-I,,GHR,S14-030

Property	Test Condition	Unit	Standard	guide value	
				d.a.m.	cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.3	
C Molding shrinkage, transverse	60x60x2; 280 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.8	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.2	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.2	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3000	1100
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	70	40
C Yield strain	50 mm/min	%	ISO 527-1,-2	6.5	25
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	20	75
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	N	N
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	N	N
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	<10	25
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	N	N
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	N	N
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	<10	25
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	<10	
Flexural modulus	2 mm/min	MPa	ISO 178-A	2600	1000
Flexural strength	2 mm/min	MPa	ISO 178-A	100	40
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	6.6	8.8
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	80	30
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	70	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	195	
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.8	
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.1	
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB	
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB	
Other properties (23 °C)					
C Density		kg/m ³	ISO 1183	1110	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	280	
C Injection molding-Mold temperature		°C	ISO 294	80	



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Property	Test Condition	Unit	Standard	guide value d.a.m. cond.
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	-	270-290
admissible residence time at Tmax		min	-	<=10
Mold temperature		°C	-	80-90

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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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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