

Datasheet

Durethan B31SH2.0 900051

PA 6, non-reinforced, injection molding, heat-aging stabilized

ISO Shortname: ISO 16396-PA 6,,GHR,S14-030

Property	Test Condition	Unit	Standard	guide value ¹ d.a.m. cond.
Rheological properties				
C Molding shrinkage, parallel	60x60x2; 600 bar	%	ISO 294-4	1.4
C Molding shrinkage, transverse	60x60x2; 600 bar	%	ISO 294-4	1.4
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.4
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.3
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3400
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	70
C Yield strain	50 mm/min	%	ISO 527-1,-2	2.5
Flexural modulus	2 mm/min	MPa	ISO 178-A	2900
Flexural strength	2 mm/min	MPa	ISO 178-A	115
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5.5
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	95
Thermal properties				
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	60
Other properties (23 °C)				
C Density		kg/m ³	ISO 1183	1140
Bulk density		kg/m ³	ISO 60	600
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	270
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	-	260-280
Mold temperature		°C	-	80-100

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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