

# Datasheet

## Durethan B30SF30 000000 DUS064

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

ISO Shortname: ISO 16396-PA 6,FR(17),GF2HR,S14-040

Property	Test Condition	Unit	Standard	guide value <sup>1</sup> d.a.m. cond.
<b>Rheological properties</b>				
C Molding shrinkage, parallel	60x60x2; 260 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.1
C Molding shrinkage, transverse	60x60x2; 260 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.1
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.4
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.4
<b>Mechanical properties (23 °C/50 % r. h.)</b>				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3600
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	70
C Yield strain	50 mm/min	%	ISO 527-1,-2	3,7
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	9.0
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	150
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	130
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	<10
Izod impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1U	120
Izod impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1U	100
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	<10
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	3200
Flexural strength	2 mm/min	MPa	ISO 178-A	110
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	100
<b>Thermal properties</b>				
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	222
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	70
C Burning behavior UL 94	1.5 mm	Class	UL 94	V-0
C Burning behavior UL 94	0.4 mm	Class	UL 94	V-0
Resistance to heat (ball pressure test)		°C	IEC 60695-10-2	200
Glow wire test (GWFI)	0.75 mm	°C	IEC 60695-2-12	960
Glow wire test (GWFI)	1.5 mm	°C	IEC 60695-2-12	960
Glow wire test (GWFI)	3.0 mm	°C	IEC 60695-2-12	960
Glow wire test (GWIT)	0.4 mm	°C	IEC 60695-2-13	960
Glow wire test (GWIT)	0.75 mm	°C	IEC 60695-2-13	900
Glow wire test (GWIT)	1.5 mm	°C	IEC 60695-2-13	850

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Glow wire test (GWIT)	3.0 mm	°C	IEC 60695-2-13	800
<b>Electrical properties (23 °C/50 % r. h.)</b>				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	275
<b>Other properties (23 °C)</b>				
C Density		kg/m <sup>3</sup>	ISO 1183	1350
Bulk density		kg/m <sup>3</sup>	ISO 60	700
<b>Processing conditions for test specimens</b>				
C Injection molding-Melt temperature		°C	ISO 294	260
C Injection molding-Mold temperature		°C	ISO 294	80
<b>Processing recommendations</b>				
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	-	250-270
admissible residence time at Tmax		min	-	<5
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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