

TECHNICAL DATA SHEET

TECHNYL SAFE C216FC S30 NC  
(Previously DOMAMID 6B30FC)

TECHNYL SAFE C216FC S30 NC is a polyamide 6, 30 % glass beads reinforced, food contact approved for injection moulding. Designed to be used for food contact in industrial consumer good applications as well as appliance applications requiring excellent surface finish and low warpage.

General

Feature	Food contact approved Low warpage	Excellent surface finish
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	Food contact EU RoHS	Food contact FDA
Applications	Small appliance Industrial Applications	Consumer good application large appliance

Product identification

ISO 1043 abbreviation	PA6-GB30
ISO 16396 designation	PA6,GB30,M1,S14-040

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm³	1.34
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.9 - 1.1
Molding shrinkage, normal		ISO 294-4, 2577	%	1 - 1.2
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm³/10 min	80

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	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4500 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	72 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	4100 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	110 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	40 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	4 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	35 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	4 / -

**Thermal properties**

Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	175
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	80
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	200

**Electrical properties**

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A	IEC 60112	V	550
CTI performance level category		Sol A		PLC 1

**Burning behaviour**

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	650
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.  
\*: conditioned according to ISO 1110

**Processing conditions**

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	230 - 260 °C
Recommended mould temperature	80 - 100 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

Processing conditions

Disclaimer

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