

TECHNICAL DATA SHEET

TECHNYL SAFE A 216FC S30 BK

(Previously DOMAMID 66B30FC)

TECHNYL SAFE A 216FC S30 BK is a polyamide 66, 30 % glass beads reinforced, food contact approved for injection moulding. Designed to be used in moulded parts requiring excellent surface finish, low warpage and food contact compliance in industrial consumer good applications as well as appliance applications.

General

Feature	Food contact approved Low warpage	Excellent surface finish
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	Food contact EU RoHS	Food contact FDA
Applications	Small appliance Industrial Applications large appliance	Consumer good application building / construction
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66-GB30
ISO 16396 designation	PA66,GB30,M1,S14-050

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.35
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.8 - 1
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	100
Viscosity number	96% H ₂ SO ₄	ISO 307	cm ³ /g	145

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	Condition	Standard	Unit	Value dam / cond.*
Mechanical properties				
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	4600 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	75 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	3900 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	120 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	35 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	28 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	4 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	235
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	95
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	240

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	500
CTI performance level category		Sol A		PLC 1

Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
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	260 - 290 °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.

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