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TECHNYL® SAFE
Food and water contact

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL SAFE A 216FC S30 BK

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

Certifications	Food contact EU RoHS	Food contact FDA
Polymer type	PA66	
Feature	food contact approved low warpage	excellent surface finish
Applications	small appliance industrial applications building / construction	consumer applications large appliance
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

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

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.35
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.8 - 1.0
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm³/10 min	100.0
Viscosity number	96% H2SO4	ISO 307	cm³/g	145.0

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
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/m²	35 / -
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	28 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	4 / -

: conditioned according to ISO 1110

	Condition	Standard	Unit	Value
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

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

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	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E13
Comparative tracking index	Solution A	IEC 60112	V	500.0
CTI performance level category		Sol A		PLC 1

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

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.