

TECHNICAL DATA SHEET

TECHNYL SAFE A 216FC V25 BK
(Previously DOMAMID 66G25FC BK)

TECHNYL SAFE A 216FC V25 BK is a polyamide 66, 25% glass fiber reinforced, food contact approved for injection moulding. Designed to be used in moulded parts requiring food contact compliance in industrial consumer good as well as appliance applications.

General

Feature	UL HB	Food contact approved
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	Food contact EU RoHS	Food contact FDA UL-Yellow Card
Applications	Small appliance Industrial Applications large appliance	Consumer good application building / construction
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66-GF25
ISO 16396 designation	PA66,GF25,M1,S14-080

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.32
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8 - 1
Viscosity number	96% H2SO4	ISO 307	cm³/g	145

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	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8500 / 6100
Stress at break	5 mm/min	ISO 527-1/-2	MPa	160 / 110
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7500 / 4000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	250 / 135
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	60 / 90
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	9.5 / 13
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	55 / 85
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	8.5 / 12.5


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	255
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	240
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	250

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

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → E170540-102223078			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 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 black products.
*: conditioned according to ISO 1110

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Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	270 - 290 °C
Recommended mould temperature	90 - 110 °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.

Disclaimer

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