

**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
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**Physical properties**

Density		ISO 1183	g/cm <sup>3</sup>	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% H <sub>2</sub> SO <sub>4</sub>	ISO 307	cm <sup>3</sup> /g	145

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	Condition	Standard	Unit	Value dam / cond.*
<b>Mechanical properties</b>				
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 → <a href="#">E170540-102223078</a>			
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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