

TECHNICAL DATA SHEET

**TECHNYL SAFE C 216FC V15 BK**  
(Previously DOMAMID 6G15FC)

TECHNYL SAFE C 216FC V15 BK is a polyamide 6, 15% glass fiber reinforced, food contact approved for injection moulding. Designed to be used in food contact in industrial consumer good as well as appliance applications.

**General**

Feature	Food contact approved	
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
Colors available	Black	
Forms	Pellets	

**Product identification**

ISO 1043 abbreviation	PA6-GF15
ISO 16396 designation	PA6,GF15,M1,S14-060

Condition	Standard	Unit	Value
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**Physical properties**

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.23
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.5
Water absorption	24 hr, 23°C	ISO 62	%	8
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8 - 1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm <sup>3</sup> /10 min	50
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145

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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	6100 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	3.5 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5200 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	200 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	45 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	7 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	40 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	7 / -
Rockwell hardness		ISO 2039/2	ScaleR	120 / -

**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	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	190
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	210

**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
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	240 - 260 °C
Recommended mould temperature	80 - 90 °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.*