

TECHNICAL DATA SHEET

TECHNYL SAFE C 216FC V35 BK

(Previously DOMAMID 6G35FC 300 BK)

TECHNYL SAFE C 216FC V35 BK is a polyamide 6, 35% 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	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Applications	Small appliance Industrial Applications large appliance	Consumer good application building / construction

Product identification

ISO 1043 abbreviation	PA6-GF35
ISO 16396 designation	PA6,GF35,M1,S14-110

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

Density		ISO 1183	g/cm ³	1.4
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2
Water absorption	24 hr, 23°C	ISO 62	%	6.3
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
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	40
Viscosity number	96% H ₂ SO ₄	ISO 307	cm ³ /g	145

TECHNICAL DATA SHEET

TECHNYL SAFE C 216FC V35 BK

	Condition	Standard	Unit	Value dam / cond.*
Mechanical properties				
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10700 / 7100
Stress at break	5 mm/min	ISO 527-1/-2	MPa	175 / 110
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 5.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9800 / 6500
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	90 / 100
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	85 / 90
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	14 / 22
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	10 / -

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	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	210
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	214

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+014

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → E329653-100458649			
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).
: 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	250 - 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.

TECHNICAL DATA SHEET

TECHNYL SAFE C 216FC V35 BK

Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufacturers in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.