+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

TECHNYL® SAFE
Food and water contact

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL SAFE C 216FC V50 NC

(Previously DOMAMID 6G50FC 300 NC)

SAFE C 216FC V50 NC is a polyamide 6, 50% glass fiber reinforced, food contact approved for injection moulding. Designed to be used in moulded part requiring good mechanical properties and food contact compliance in industrial consumer good as well as appliance applications.

General

Feature	Food contact approved Good strength	Good stiffness
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	
Applications	Small appliance Industrial Applications	Consumer good application large appliance
Colors available	Natural	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF50
ISO 16396 designation	PA6,GF50,M1,S14-160

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.56
Humidity absorption	T=23°C, 50% RH	ISO 62	%	1.7
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.25 - 0.45
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	15
Viscosity number	96% H2SO4	ISO 307	cm³/g	145

TECHNYL® SAFE
Food and water contact

DOMO
caring is our formula

TECHNICAL DATA SHEET **TECHNYL SAFE C 216FC V50 NC**

	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	16500 / 9300
Stress at break	5 mm/min	ISO 527-1/-2	MPa	235 / 150
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	12500 / 9100
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	95 / 105
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	100 / 105
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	20 / 30
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	16 / 17
Charpy notched impact strength		ISO 179/1eA	kJ/m²	0 / -
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Burning behaviour				
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)
Rear temperature	250 - 270 °C
Middle temperature	260 - 280 °C
Front temperature	260 - 290 °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.

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 manufactures 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.