

TECHNICAL DATA SHEET

TECHNYL SAFE C 216FC V30 BK

DOMAMID 6G30FC 300 BK

TECHNYL SAFE C 216FC V30 BK is a polyamide 6, 30% 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

Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Polymer type	PA6	
Feature	food contact approved	
Applications	small appliance industrial applications building / construction	consumer applications large appliance
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1,S14-090

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm ³	1.36	
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.0 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	6.6
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	cm ³ /10 min	45.0
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145.0

Condition	Standard	Unit	Value
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Mechanical properties

Condition	Standard	Unit	Value	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9400 / 5300
Stress at break	5 mm/min	ISO 527-1/-2	MPa	170 / 105
Strain at break	5 mm/min	ISO 527-1/-2	%	3 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7400 / 4500
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	65 / 90
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	60 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	9 / 16
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	6 / -

*: **conditioned according to ISO 1110**

Condition	Standard	Unit	Value
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Thermal properties

Condition	Standard	Unit	Value
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

Condition	Standard	Unit	Value
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Burning behaviour

UL Yellow Card availability 1	Click here to have access to the UL Yellow Card availability 1 -> E329653-100458649			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Condition	Standard	Unit	Value
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Electrical properties

Condition	Standard	Unit	Value
Volume resistivity	IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity	IEC 62631-3-1	ohm	1.0E14

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

Disclaimer

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