

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
-----------	----------	------	-------

## Physical properties

Condition	Standard	Unit	Value	
Density	ISO 1183	g/cm <sup>3</sup>	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 <sup>3</sup> /10 min	45.0
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145.0

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

## 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 <sup>2</sup>	65 / 90
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	60 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	9 / 16
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	6 / -

\*: **conditioned according to ISO 1110**

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

## Thermal properties

Condition	Standard	Unit	Value
Melting temperature, 10°C/min	ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	ISO 75	°C	220
Temp. of deflection under load, 1.80 MPa	ISO 75	°C	210
Vicat softening temperature	ISO 306	°C	214

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

## Burning behaviour

UL Yellow Card availability 1	<b><a href="#">Click here to have access to the UL Yellow Card availability 1 -&gt; E329653-100458649</a></b>		
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
-----------	----------	------	-------

## 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