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TECHNICAL DATA SHEET

TECHNYL C 216 V30 NC

TECHNYL C 216 V30 NATURAL / DOMAMID 6G30 300 NC / DOMAMID 6G30 300 NC / DOMAMID 6G30 NC

TECHNYL C 216 V30 NC is a polyamide 6, reinforced with 30% of glass fibre, for injection moulding. This grade has good mechanical properties and offering an excellent combination between thermal and mechanical properties.

General

Polymer type	PA6	
Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Applications	home & office furniture outdoor applications sport	general purpose power tool / garden equipment white goods / small appliances
Colors available	black grey	natural
Forms	pellets	
Processing technology	injection moulding	

Product identification

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

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.36
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2 - 0.4
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7 - 0.9

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	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9300 / 5600
Stress at break		ISO 527-1/-2	MPa	175 / 110
Strain at break		ISO 527-1/-2	%	3.5 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7500 / 4500
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	250 / 150
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	90 / 105
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	75 / 75
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	14 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	11 / 11
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	80 / 90
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	12 / 20
Rockwell hardness		ISO 2039/2	ScaleR	122 / -

: conditioned according to ISO 1110

	Condition	Standard	Unit	Value
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	205
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	214

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Burning behaviour

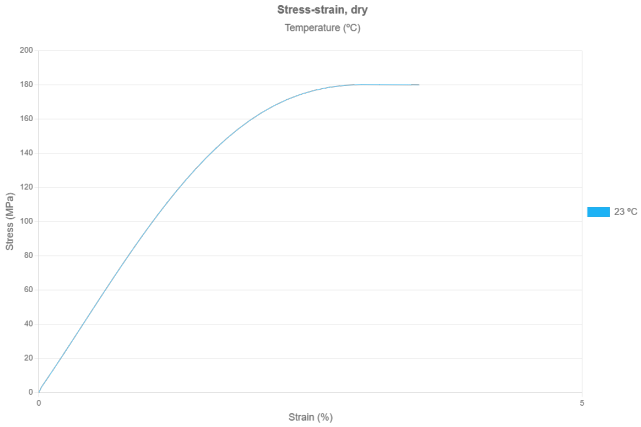
	Condition	Standard	Unit	Value
UL Yellow Card availability 1	**Click here to have access to the UL Yellow Card availability 1 -> QMFZ2.E44716**			
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB
Glow-wire ignition temperature, GWIT, 1.5 mm	1.5 mm	IEC 60695-2-13	°C	650

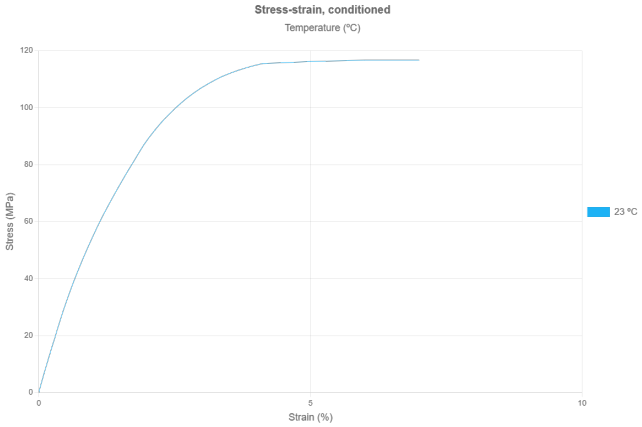
Electrical properties

	Condition	Standard	Unit	Value
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14
Comparative tracking index	Solution A	IEC 60112	V	500.0
CTI performance level category		Sol A		PLC 1
Dielectric strength	1 mm	IEC 60243-1	kV/mm	19.8

Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	240 - 250 °C
Recommended melt temperature	230 - 250 °C
Recommended mould temperature	60 - 90 °C





Injection notes

The material is supplied in airtight bags, ready for use.,In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C.,Recommended time 2-4h.

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.