

TECHNICAL DATA SHEET

TECHNYL C 218 V30 BK 34NG LP

TECHNYL C 218 V30 BK 34NG LP is a polyamide 6, reinforced with 30% of glass fiber, heat stabilized, and modified for having coolant resistance meeting moderate temperature needs until 110°C. This grade is a multi-purpose grade, suitable for injection molding, and offers an excellent combination between thermal and mechanical properties.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	heat-aging stabilized glycol resistant	lasermarkable
Applications	automotive applications	connectors
Colors available	black	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6,GF30
ISO 16396 designation	PA6,GF30,MO2,S14-100

Condition	Standard	Unit	Value
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Physical properties

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm ³	1.37
Humidity absorption	T=23°C, 50% RH (equivalent ISO 1110)	%	2.2 - 2.4
Water absorption	24 hr, 23°C, immersion in water, thickness 2mm	%	1.4 - 1.5
Water absorption, saturation		%	6.1
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.1 - 0.3
Molding shrinkage, normal	ISO 294-4, 2577	%	0.7 - 0.9

Condition	Standard	Unit	Value
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Mechanical properties

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Condition	Standard	Unit	Value	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10200 / 6000
Stress at break		ISO 527-1/-2	MPa	185 / 115
Strain at break		ISO 527-1/-2	%	3.1 / 8.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	9300 / 5250
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	280 / 160
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	80 / 95
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m ²	68 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	11.5 / 20
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	9 / -

*: **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	220
Temp. of deflection under load, 1.80 MPa	ISO 75	°C	206

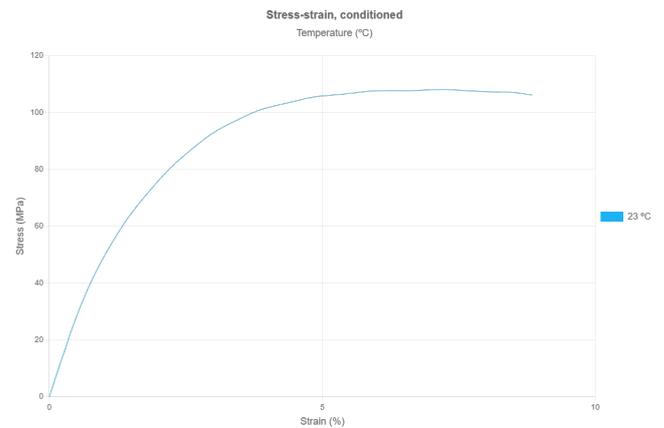
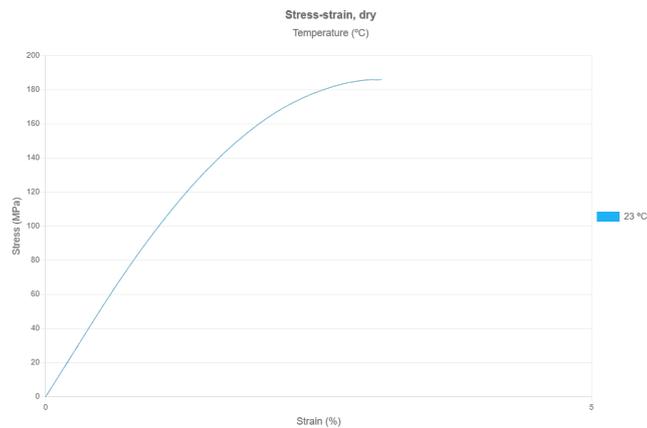
Condition	Standard	Unit	Value
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Burning behaviour

Burning rate, FMVSS, Thickness 1 mm		FMVSS 302	<100 mm/min
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Processing conditions

Drying temperature/time	80
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	240 - 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.