

TECHNICAL DATA SHEET

TECHNYL C 246 V30 NC

TECHNYL C 246 V30 NC is a polyamide 6, reinforced with 30 % of glass fibre, impact modified, for injection moulding. This grade offers high impact strength and good mechanical properties.

General

Feature	Good surface finish	High impact resistant
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Applications	Consumer good application Power Tool & Garden Equipment	Outdoor Applications Sport
Colors available	Natural	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF30
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.32
Water absorption	24 hr, 23°C	ISO 62	%	0.95
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.06
Molding shrinkage, normal		ISO 294-4, 2577	%	0.85

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	Condition	Standard	Unit	Value
Mechanical properties			dam / cond.*	
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8200 / 5400
Stress at break		ISO 527-1/-2	MPa	140 / 90
Strain at break		ISO 527-1/-2	%	4 / 6
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8000 / 5200
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	86 / 100
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	85 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	18 / 30
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	11 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	17 / 29

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+014

Burning behaviour

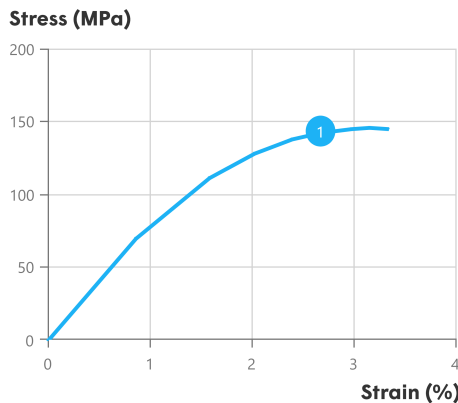
UL Yellow Card availability 	Click here to have access to the UL Yellow Card → QMFZ2.E44716			
Flammability, 1.5 mm	1.5 mm	UL 94		HB

*: conditioned according to ISO 1110

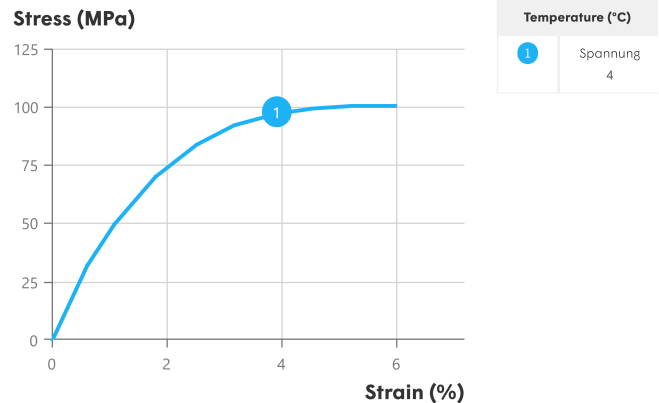
Processing conditions

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 mould temperature	60 - 90 °C

Stress-strain, dry



Stress-strain, conditioned



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.

Disclaimer

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