

## TECHNICAL DATA SHEET

# TECHNYL C 246 NC

TECHNYL C 246 NC is an unfilled polyamide 6, impact modified, for injection moulding. This grade offers high impact strength, flexibility and good surface aspect.

### General

Feature	Good surface finish Low temperature impact resistant	High impact resistant
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Consumer good application Power Tool & Garden Equipment White Goods & Small Appliances	Industrial Applications Sport
Colors available	Natural	
Forms	Pellets	

### Product identification

ISO 1043 abbreviation	PA6
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Condition	Standard	Unit	Value
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### Physical properties

Property	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.06
Water absorption	24 hr, 23°C	ISO 62	%	1.2

### Mechanical properties

Property	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	1600 / 500
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1550 / 400
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	70 / 25
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	80 / 100
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	15 / 17
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	60 / 80
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m <sup>2</sup>	- / 20

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	60

### Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+014
Comparative tracking index	Solution A	IEC 60112	V	600
CTI performance level category		Sol A		PLC 0

### Burning behaviour

Flammability, 1.5 mm	1.5 mm	UL 94		HB
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\*: 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	235 - 245 °C
Recommended mould temperature	60 - 80 °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 unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (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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