

## TECHNICAL DATA SHEET

# TECHNYL A 230 NC

TECHNYL A 230 NC is an unfilled polyamide 6.6, impact modified, for injection moulding. This grade offers excellent combination between rigidity and impact resistance at ambient temperature. This property save special conditioning before use parts (water absorption).

### General

Feature	Impact resistant	
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Consumer good application Industrial Applications	Fasteners White Goods & Small Appliances
Colors available	Natural	
Forms	Pellets	

### Product identification

ISO 1043 abbreviation	PA66
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Condition	Standard	Unit	Value
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### Physical properties

Density		ISO 1183	g/cm <sup>3</sup>	1.1
Water absorption	24 hr, 23°C	ISO 62	%	1.1

### Mechanical properties

dam / cond.\*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2550 / 1400
Stress at break		ISO 527-1/-2	MPa	50 / 40
Strain at break		ISO 527-1/-2	%	30 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2250 / 1200
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	95 / 47
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	10 / 20
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	8 / 16

### Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70

Condition	Standard	Unit	Value
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## Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+015
Dielectric strength	1 mm	IEC 60243-1	kV/mm	22

\*: conditioned according to ISO 1110

## Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	265 - 275 °C
Middle temperature	270 - 280 °C
Front temperature	280 - 285 °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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