

TECHNICAL DATA SHEET

TECHNYL C 230 NC

TECHNYL C 230 NC is an unreinforced polyamide 6, with improved impact resistance, for injection moulding. This grade offers improved impact strength and higher flexibility. The grade is designed to make technical parts having small or medium size. This product is available in natural color.

General

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	impact resistant(obs)	
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6
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Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Water absorption, saturation			%	9.0
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2600 / 720
Stress at break		ISO 527-1/-2	MPa	45 / 35
Strain at break		ISO 527-1/-2	%	50 / 200
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2500 / 800
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	100 / 35
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	11 / 90
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	9 / 80

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
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	75

	Condition	Standard	Unit	Value
Burning behaviour				
Flammability, 1.5 mm	1.5 mm	UL 94		HB

	Condition	Standard	Unit	Value
Electrical properties				
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	600.0
CTI performance level category		Sol A		PLC 0

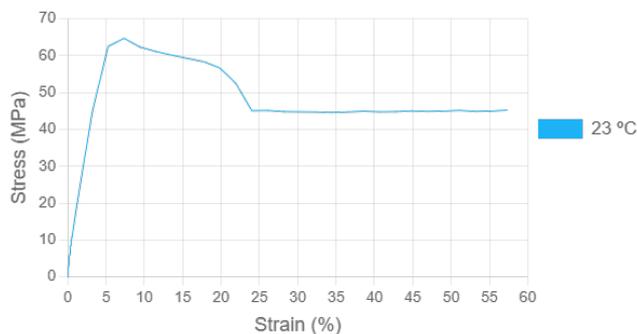
Processing conditions				
Drying temperature/time	80 °C			

Processing conditions

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

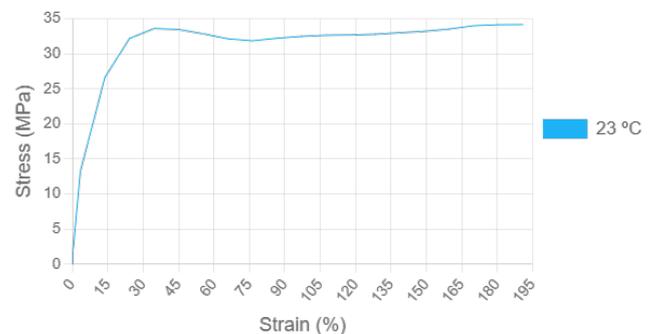
Stress-strain, dry

Temperature (°C)



Stress-strain, conditioned

Temperature (°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.