

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

Feature	Impact resistant		
Polymer type	PA6 (Polyamide 6)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Colors available	Natural		
Forms	Pellets		

Product identification

ISO 1043 abbreviation	PA6		
-----------------------	-----	--	--

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Water absorption, saturation			%	9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5

				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

TECHNICAL DATA SHEET

TECHNYL C 230 NC

	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

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

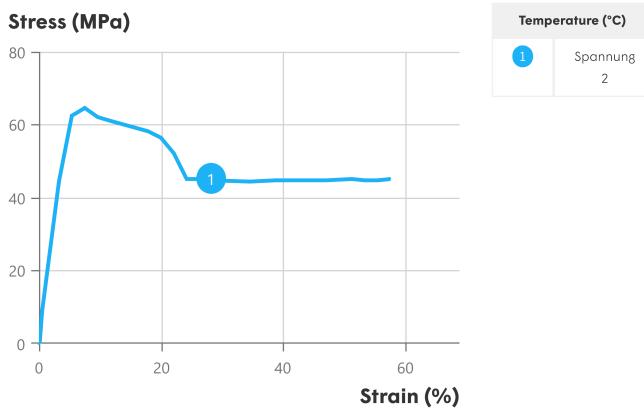
Flammability, 1.5 mm	1.5 mm	UL 94		HB
----------------------	--------	-------	--	----

*: conditioned according to ISO 1110

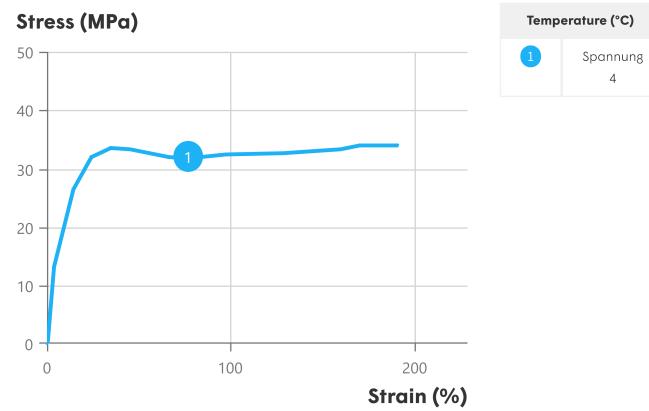
Processing conditions

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

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 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

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufacturers in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.