

TECHNICAL DATA SHEET

TECHNYL C 206F NC

TECHNYL C 206F NC is an unreinforced polyamide PA6, standard for fast injection cycles, for injection moulding. This grade has high fluidity and a good mould release.

General

Certifications	RoHS EC 1907/2006 (REACH)	UL listed product
Polymer type	PA6	
Feature	fast molding cycle	not heat stabilized
Applications	fasteners aerosol valve	fittings
Colors available	natural	
Forms	pellets	
Processing technology	injection moulding	

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M,S14-030

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.14
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.2 - 3.3
Water absorption	24 hr, 23°C	ISO 62	%	1.8 - 1.9
Water absorption, saturation			%	9.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.0 - 1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.1 - 1.3

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3000 / 1100
Stress at break		ISO 527-1/-2	MPa	50 / 60
Strain at break		ISO 527-1/-2	%	15 / 200
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2800 / 1000
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	100 / 40
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4 / 15
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	4 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5 / 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	60

	Condition	Standard	Unit	Value
Burning behaviour				
UL Yellow Card availability 1	Click here to have access to the UL Yellow Card availability 1 -> E44716			
Flammability, 3.0 mm	3.0 mm	UL 94		V2
Glow-wire ignition temperature, GWIT, 0.75 mm	0.75 mm	IEC 60695-2-13	°C	675
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100mm/min

Condition	Standard	Unit	Value
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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
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.