



**TECHNICAL DATA SHEET** 

# **TECHNYL C 102 NC DF**

TECHNYL C 102 NC DF us a polyamide 6 unfilled, modified and optimized for pre-processing, with improved flowability, for fast cycle injection moulding, natural color"

## General

Feature	UL V2	Improved flowability
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Colors available	Natural	
Forms	Pellets	

## **Product identification**

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M1,S12-030

Physical properties			
Density	ISO 1183	g/cm³	1.14
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.9 - 1.1
Molding shrinkage, normal	ISO 294-4, 2577	%	1 - 1.2

## Mechanical properties dam / cond.\*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	20 / -
Yield stress	50 mm/min	ISO 527-1/-2	МРа	82 / -
Yield strain	50 mm/min	ISO 527-1/-2	%	4.2 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	NB / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	4.5 / -
lzod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	NB / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	4.5 / -

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850

850

750

< 100 mm/min

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	Condition				
Thermal properties					
Melting temperature, 10°C/min		ISO 11357-1	°C	221	
Electrical properties					
Volume resistivity		IEC 62631-3-1	ohm.m	1E+016	
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  UL Yellow Card availability (1)		Click he	re to have access to the U	IL Yellow Card → <u>YC lin</u>	
Flammability, 0.75 mm	0.75 mm	UL 94		V2	
Flammability, 1.5 mm	1.5 mm	UL 94		V2	
Flammability, 3.0 mm	3.0 mm	UL 94		V2	
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	850	

IEC 60695-2-12

IEC 60695-2-12

IEC 60695-2-13

**FMVSS 302** 

°C

°C

°C

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products. \*: conditioned according to ISO 1110

1.5 mm

3.0 mm

1.5 mm

Burning rate, FMVSS, Thickness 1 mm

Glow-wire flammability index, GWFI, 1.5

Glow-wire flammability index, GWFI, 3.0

Glow-wire ignition temperature, GWIT, 1.5

## **Processing conditions**

Drying temperature/time	$75-85^{\circ}$ C / 2-4h (with dew point of dried air < -30 $^{\circ}$ C)
Rear temperature	230 - 240 °C
Middle temperature	240 - 250 °C
Front temperature	250 - 260 °C
Recommended melt temperature	230 - 260 °C
Recommended mould temperature	60 - 90 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.





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