

## TECHNICAL DATA SHEET

# TECHNYL C 102 NC DF

TECHNYL C 102 NC DF is 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

Condition	Standard	Unit	Value
-----------	----------	------	-------

### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	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

	Condition	Standard	Unit	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	MPa	82 / -
Yield strain	50 mm/min	ISO 527-1/-2	%	4.2 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	NB / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	4.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	NB / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	4.5 / -

## TECHNICAL DATA SHEET

TECHNYL C 102 NC DF

	Condition	Standard	Unit	Value
--	-----------	----------	------	-------

### 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 	Click here to have access to the UL Yellow Card → <a href="#">YC link</a>			
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
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	850
Glow-wire flammability index, GWFI, 3.0 mm	3.0 mm	IEC 60695-2-12	°C	850
Glow-wire ignition temperature, GWIT, 1.5 mm	1.5 mm	IEC 60695-2-13	°C	750
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

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

### Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °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.