

## TECHNICAL DATA SHEET

# TECHNYL C 236SI NC

(Previously DOMAMID 6IK2 NC)

Polyamide 6, low temperature impact modified, for injection moulding

### General

Feature	UL HB	Low temperature impact modified
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	UL-Yellow Card

### Product identification

ISO 1043 abbreviation	PA6-I
ISO 16396 designation	PA6-I,M1,S14-020

#### Condition

#### Standard

#### Unit

#### Value

### Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.07
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2 - 1.4
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5 - 1.7
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145

### Mechanical properties

dam / cond.\*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2350 / 900
Strain at break	50 mm/min	ISO 527-1/-2	%	50 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	60 / 35
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2050 / 800
Charpy impact strength, +23°C	+23°C	ISO 179/1eU		NB / NB
Charpy impact strength, -30°C	-30°C	ISO 179/1eU		NB / NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	45 / 105
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	16 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U		NB / NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	40 / 105
Izod notched impact strength, -30°C	-30°C	ISO 180/1A	kJ/m <sup>2</sup>	15 / -
Rockwell hardness		ISO 2039/2	ScaleR	105 / -

Condition	Standard	Unit	Value
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## Thermal properties

Condition	Standard	Unit	Value
Melting temperature, 10°C/min	ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa ISO 75	°C	145
Temp. of deflection under load, 1.80 MPa	1.80 MPa ISO 75	°C	55
Vicat softening temperature	50°C/h - 50N ISO 306	°C	180

## Electrical properties

Volume resistivity	IEC 62631-3-1	ohm.m	1E+013
Surface resistivity	IEC 62631-3-1	ohm	1E+013

## Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → <a href="https://www.ul.com/Products-and-Solutions/Plastics-and-Rubber/Plastics/TECHNYL-C-236SI-NC">E170540-100555102</a>		
Flammability, 0.75 mm	0.75 mm	UL 94	HB
Flammability, 3.0 mm	3.0 mm	UL 94	HB
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)
Recommended melt temperature	240 - 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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