

## TECHNICAL DATA SHEET

# TECHNYL A 219 NC BL

(Previously DOMAMID 66H1 NCBL)

Polyamide 66, heat-aging stabilized, for injection moulding. For Asian availability only.

### General

Feature	Heat-aging stabilized		
Polymer type	PA66 (Polyamide 66)		
Processing technology	Injection molding		
Certification	RoHS	EC 1907/2006 (REACH)	
Colors available	Natural		
Forms	Pellets		

### Product identification

ISO 1043 abbreviation	PA66
ISO 16396 designation	PA66,M1H,S14-030

#### 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	%	1 - 1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2 - 1.4
Viscosity number	96% H2SO4	ISO 307	cm <sup>3</sup> /g	145

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3200 / 1200
Strain at break	50 mm/min	ISO 527-1/-2	%	35 / 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	85 / 55
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	110 / -
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>	4.5 / 14
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>	4.5 / 13
Rockwell hardness		ISO 2039/2	ScaleR	121 / -

### Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	70
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	245

### Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013
Comparative tracking index	Solution A	IEC 60112	V	600
CTI performance level category		Sol A		PLC 0

### Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		V2
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	750
Glow-wire ignition temperature, GWIT	1-3 mm	IEC 60695-2-13	°C	650
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	265 - 275 °C
Middle temperature	270 - 280 °C
Front temperature	280 - 285 °C
Recommended melt temperature	265 - 285 °C
Recommended mould temperature	40 - 80 °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.*

## 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.

## Disclaimer

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