

TECHNICAL DATA SHEET

TECHNYL A 216M NC

(Previously DOMAMID 6611 NC)

Polyamide 66, impact modified, for injection moulding

General

Feature	Impact modified
Polymer type	PA66 (Polyamide 66)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA66-I
ISO 16396 designation	PA66-I,M1,S14-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.1
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2
Water absorption	24 hr, 23°C	ISO 62	%	7.5
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2 - 1.4
Molding shrinkage, normal		ISO 294-4, 2577	%	1.4 - 1.6

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2700 / 1350
Strain at break	50 mm/min	ISO 527-1/-2	%	< 50 / > 50
Yield stress	50 mm/min	ISO 527-1/-2	MPa	70 / 50
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2500 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	90 / -
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 ²	15 / 25
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 ²	14 / 23
Rockwell hardness		ISO 2039/2	ScaleR	115 / -

Condition	Standard	Unit	Value
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Thermal properties

Condition	Standard	Unit	Value
Melting temperature, 10°C/min	ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa ISO 75	°C	180
Temp. of deflection under load, 1.80 MPa	1.80 MPa ISO 75	°C	65
Vicat softening temperature	50°C/h - 50N ISO 306	°C	235

Electrical properties

Condition	Standard	Unit	Value
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

Condition	Standard	Unit	Value
Flammability, 0.75 mm	0.75 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	270 - 290 °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.

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