

TECHNICAL DATA SHEET

TECHNYL C 226M NC

DOMAMID 6N1 500 NC

Polyamide 6, nucleated, improved impact resistance, for injection moulding

General

Polymer type	PA6
Certifications	RoHS
Feature	improved impact resistance(obs) nucleated
Processing technology	injection moulding

Product identification

ISO 1043 abbreviation	PA6-I
ISO 16396 designation	PA6-I,M1,S14-030

Condition	Standard	Unit	Value
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Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.95 - 1.15
Molding shrinkage, normal		ISO 294-4, 2577	%	1.0 - 1.2
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145.0

	Condition	Standard	Unit	Value
Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3000 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	20 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	85 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2500 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	13 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	NB
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	12 / -

*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
Thermal properties				
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	60

	Condition	Standard	Unit	Value
Burning behaviour				
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

	Condition	Standard	Unit	Value
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity		IEC 62631-3-1	ohm	1.0E14

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

Processing conditions

Recommended melt temperature	240 - 280 °C
Recommended mould temperature	60 - 80 °C

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.

Injection advice

For unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.