

TECHNICAL DATA SHEET

TECHNYL A 222 NC

TECHNYL A 222 NC is an unfilled polyamide 66, heat stabilized, medium viscosity, for injection moulding, fast crystallization, for short cycles. This grade offers a good combination between primary properties of the unreinforced polyamide 66 and processing properties leading to increased productivity. These performances are associated with excellent dimensional stability and good rigidity of moulded parts.

General

Feature	Heat-aging stabilized	Fast molding cycle
Polymer type	PA66 (Polyamide 66)	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Connectors Industrial Applications	Consumer good application
Colors available	Black	Natural
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.1
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.4

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3600 / 1700
Stress at break		ISO 527-1/-2	MPa	90 / 50
Strain at break		ISO 527-1/-2	%	20 / 200
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	3000 / 1400
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	125 / 50
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	4.5 / 15
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	4 / 12

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Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	75

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+015
Dielectric strength	1 mm	IEC 60243-1	kV/mm	22

Burning behaviour

Flammability, 1.5 mm	1.5 mm	UL 94		V2
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	700

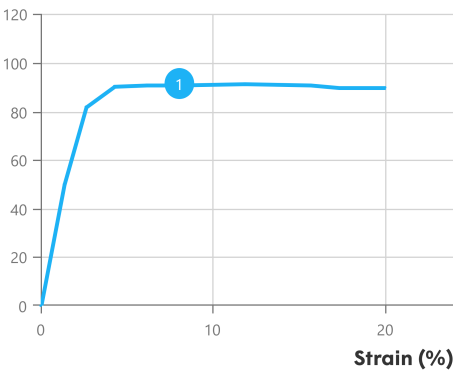
*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	265 - 275 °C
Middle temperature	270 - 280 °C
Front temperature	280 - 285 °C
Recommended mould temperature	60 - 80 °C

Stress-strain, dry

Stress (MPa)



Temperature (°C)

1 Spannung
1

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.

Disclaimer

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