

TECHNICAL DATA SHEET

TECHNYL C 316 NC

(Previously DOMAMID 6MV 303 NC)

Polyamide 6, medium viscosity, for injection moulding, natural color

General

Feature	Medium viscosity
Polymer type	PA6 (Polyamide 6)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA6
ISO 16396 designation	PA6,M1,S18-030

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.13
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.4 - 1.6
Molding shrinkage, normal		ISO 294-4, 2577	%	1.4 - 1.6
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm ³ /10 min	45
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	190

Mechanical properties				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2800 / 1700
Stress at break	50 mm/min	ISO 527-1/-2	MPa	50 / 65
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80 / 20
Yield strain	50 mm/min	ISO 527-1/-2	%	4 / 4.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2500 / 950
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	7 / -

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	65

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+014

Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
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Test run at 23°C if not differently specified, DAM state (dry as moulded).
*: 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 - 280 °C
Recommended mould temperature	60 - 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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