

TECHNICAL DATA SHEET

TECHNYL C 302 NC

(Previously DOMAMID 6MV)

Polyamide 6, medium viscosity, for injection moulding

General

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

Product identification

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

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.14
Humidity absorption	T=23°C, 50% RH	ISO 62	%	3.3 - 3.4
Water absorption	24 hr, 23°C	ISO 62	%	1.9 - 2
Water absorption, saturation			%	9.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm³/10 min	44
Viscosity number	96% H2SO4	ISO 307	cm³/g	200

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	2900 / -
Strain at break	50 mm/min	ISO 527-1/-2	%	40 / -
Yield stress	50 mm/min	ISO 527-1/-2	MPa	80 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	2700 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	95 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	5.5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	5.5 / -
Rockwell hardness		ISO 2039/2	ScaleR	120 / -

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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, 0.45 MPa	0.45 MPa	ISO 75	°C	180
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	205

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		HB
Glow-wire flammability index, GWFI	1-3 mm	IEC 60695-2-12	°C	850 - 960
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	230 - 260 °C
Recommended mould temperature	80 - 100 °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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