

TECHNICAL DATA SHEET

TECHNYL C 219 MT40 NC

(Previously DOMAMID 6M40H1)

Polyamide 6, 40% mineral filler, heat-aging stabilized, for injection moulding

General

Feature	Heat-aging stabilized
Polymer type	PA6 (Polyamide 6)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA6-MD40
ISO 16396 designation	PA6,MD40,M1H,S14-060

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm ³	1.46
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.8 - 1
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8 - 1
Viscosity number	96% H2SO4	ISO 307	cm ³ /g	145

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6400 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	90 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	8 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	6000 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	140 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	90 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	80 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	5 / -

	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	195
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	100
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

Burning behaviour

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	240 - 280 °C
Recommended mould temperature	90 - 120 °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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