

TECHNICAL DATA SHEET

TECHNYL A 219 MT40 BK  
(Previously DOMAMID 66M40H1)

Polyamide 66, 40% mineral filler, heat-aging stabilized, for injection moulding

General

Feature	Heat-aging stabilized
Polymer type	PA66 (Polyamide 66)
Processing technology	Injection molding
Certification	RoHS

Product identification

ISO 1043 abbreviation	PA66-MD40
ISO 16396 designation	PA66,MD40,M1H,S14-060

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm <sup>3</sup>	1.47

Mechanical properties

				dam / cond.*
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	6000 / -
Stress at break	5 mm/min	ISO 527-1/-2	MPa	90 / -
Strain at break	5 mm/min	ISO 527-1/-2	%	6 / -
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	5800 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	140 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	100 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	5.5 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	80 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	5.5 / -

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	262
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	220
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	180
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	245

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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	270 - 290 °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.

Disclaimer

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