

TECHNICAL DATA SHEET

**TECHNYL SHAPE C 402M NC**  
(Previously TECHNYL C 402M NATURAL)

TECHNYL SHAPE C 402M NC is an unreinforced polyamide 6, high viscosity, for extrusion. This grade offers high flexibility and high impact performance.

**General**

Feature	High viscosity	Impact resistant
Polymer type	PA6 (Polyamide 6)	
Processing technology	Extrusion	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Consumer good application Wire & Cable	Industrial Applications
Colors available	Natural	
Forms	Pellets	

**Product identification**

ISO 1043 abbreviation	PA6
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	Condition	Standard	Unit	Value
<b>Physical properties</b>				
Density		ISO 1183	g/cm <sup>3</sup>	1.14
Water absorption	24 hr, 23°C	ISO 62	%	1.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.5
Molding shrinkage, normal		ISO 294-4, 2577	%	1.5

**Mechanical properties**

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	1200 / 550
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1000 / 530
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	50 / 30
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	18 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	15 / -

**Thermal properties**

Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	65

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**Electrical properties**

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

**Burning behaviour**

Flammability, 1.5 mm	1.5 mm	UL 94		HB
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\*: conditioned according to ISO 1110

**Processing conditions**

Drying temperature/time	8H at 80°C with dry air, dew point -35°C			
Suggested max moisture	0.08 %			
Feed zone temperature for extrusion	225 - 240 °C			
Compression zone temperature for extrusion	230 - 250 °C			
Front zone temperature for extrusion	235 - 255 °C			
Die zone temperature for extrusion	230 - 250 °C			
Recommended extrusion temperature	225 - 255 °C			

**Disclaimer**

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