TECHNYL® SHAPE
For extrusion & blow molding

DOMO
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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

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	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				**dam / cond.***
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/m²	18 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	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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	Condition	Standard	Unit	Value
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

**: 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