

TECHNICAL DATA SHEET

TECHNYL SHAPE D 437P NC
(Previously TECHNYL EXTEN D 437P NATURAL)

TECHNYL SHAPE D 437P NC is an unfilled polyamide 6.10, medium viscosity, unfilled, plasticized, UV and heat stabilized, for extrusion applications. This polyamide 6,10 for extrusion is specially performing where high flexibility and toughness are requested. It is specially developed for automotive and other applications where a long term high temperature usage is requested. It is a partially bio-sourced material.

General

Feature	Heat-aging stabilized Contains renewable content Low moisture absorption	Chemical resistant Good impact resistant
Polymer type	PA610 (Polyamide 610)	
Processing technology	Extrusion	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Piping	
Colors available	Natural	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA610
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.09
Water absorption	24 hr, 23°C	ISO 62	%	0.65
Water absorption, saturation			%	1.9
Molding shrinkage, parallel		ISO 294-4, 2577	%	1.9
Molding shrinkage, normal		ISO 294-4, 2577	%	1.9

Mechanical properties

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	820 / 450
Stress at break		ISO 527-1/-2	MPa	44 / 40
Strain at break		ISO 527-1/-2	%	200 / 200
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	720 / 470
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	14 / 140
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	3 / -

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	215
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	128
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	52

*: 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	200 - 220 °C
Compression zone temperature for extrusion	210 - 230 °C
Front zone temperature for extrusion	215 - 235 °C
Die zone temperature for extrusion	210 - 230 °C
Recommended extrusion temperature	200 - 235 °C

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