

TECHNICAL DATA SHEET

TECHNYL SHAPE C 442 BK V
(Previously TECHNYL C 442 BLACK V)

TECHNYL SHAPE C 442 BK V is an unreinforced polyamide 6, impact modified, high viscosity, for extrusion. This grade offers high flexibility and very high impact resistance even at low temperature.

General

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

Product identification

ISO 1043 abbreviation	PA6
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Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm ³	1.07
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	2
Molding shrinkage, normal		ISO 294-4, 2577	%	1.6

Mechanical properties

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	650 / 325
Stress at break		ISO 527-1/-2	MPa	40 / 20
Strain at break		ISO 527-1/-2	%	300 / 300
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	650 / 325
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	25 / 12
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	85 / -

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	Condition	Standard	Unit	Value
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	50

Electrical properties

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

*: 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	220 - 230 °C
Compression zone temperature for extrusion	225 - 240 °C
Front zone temperature for extrusion	230 - 245 °C
Die zone temperature for extrusion	230 - 240 °C
Recommended extrusion temperature	220 - 245 °C

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