

TECHNICAL DATA SHEET

TECHNYL SHAPE C 548B BK  
(Previously TECHNYL C 548B BLACK)

TECHNYL SHAPE C 548B BK is an unreinforced polyamide 6, high viscosity, for extrusion blow-moulding. This grade offers a good processing behaviour, high impact resistance even at low temperature and high barrier properties especially to fluids such as fuels and oils, as well as a high toughness.

General

Feature	High viscosity Low temperature impact resistant	High impact resistant High melt strength
Polymer type	PA6 (Polyamide 6)	
Processing technology	Extrusion	Blow molding
Certification	RoHS	EC 1907/2006 (REACH)
Applications	fuel system	
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 <sup>3</sup>	1.07
Water absorption	24 hr, 23°C	ISO 62	%	1.2
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.8
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2

Mechanical properties

dam / cond.\*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	1900 / 500
Stress at break		ISO 527-1/-2	MPa	40 / 38
Strain at break		ISO 527-1/-2	%	60 / 100
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	1750 / 850
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	70 / 45
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	100 / -
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	16 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	90 / -

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Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	80
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	55

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+015

Burning behaviour

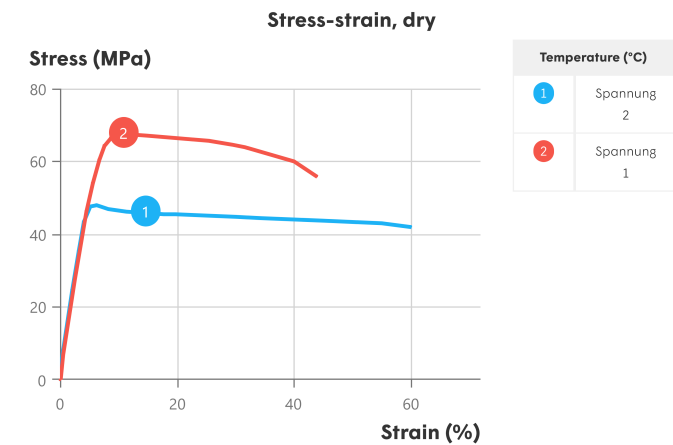
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	650

\*: 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 blow-molding	210 - 230 °C
Screw temperature for blow-molding	220 - 240 °C
Adapter temperature for blow-molding	220 - 240 °C
Head temperature for blow-molding	220 - 240 °C
Die temperature for blow-molding	215 - 235 °C
Mold temperature for blow molding	40 - 60 °C
Recommended blow-molding temperature	210 - 240 °C

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