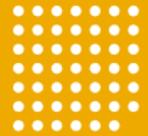


TECHNICAL DATA SHEET

**TECHNYL SHAPE C 548B BK**  
**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**

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA6	
Feature	high viscosity high melt strength	high impact resistant low temperature impact resistant
Applications	fuel system	
Colors available	black	
Forms	pellets	
Processing technology	extrusion	blow moulding

**Product identification**

ISO 1043 abbreviation	PA6
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Condition	Standard	Unit	Value
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**Physical properties**

Condition	Standard	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	1.07
Humidity absorption	T=23°C, 50% RH	%	2.6
Water absorption	24 hr, 23°C	%	1.2
Molding shrinkage, parallel	ISO 294-4, 2577	%	0.8
Molding shrinkage, normal	ISO 294-4, 2577	%	1.2

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
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
Yield stress		ISO 527-1/-2	MPa	48 / -
Yield strain		ISO 527-1/-2	%	10 / -
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 / -

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
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

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
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
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100 mm/min

Condition	Standard	Unit	Value
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**Electrical properties**

Volume resistivity	IEC 62631-3-1	ohm.m	1.0E13
Surface resistivity	IEC 62631-3-1	ohm	1.0E15

**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

