

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
-----------------------	-----

Condition	Standard	Unit	Value
-----------	----------	------	-------

Physical properties

	Condition	Standard	Unit	Value
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	%	0.8
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2

Mechanical properties

	Condition	Standard	Unit	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 ²	100 / -
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m ²	16 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	90 / -

TECHNICAL DATA SHEET

TECHNYL SHAPE C 548B BK

	Condition	Standard	Unit	Value
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

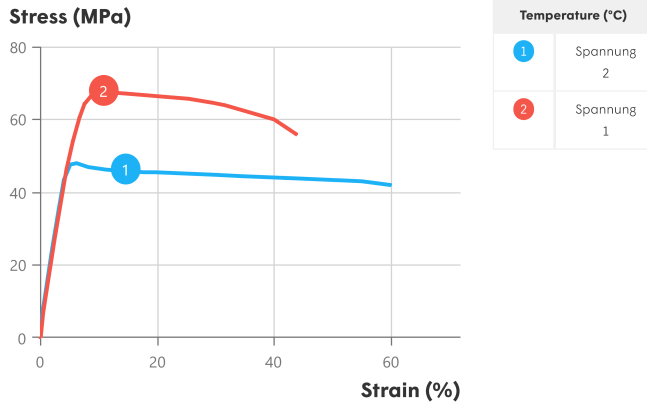
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+015

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

Stress-strain, dry



Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.