

TECHNICAL DATA SHEET

TECHNYL SHAPE D 458P BK

(Previously TECHNYL EXTE^N D 458P BLACK)

TECHNYL eXten D 458P Black is a high viscosity unfilled plasticized PA6.10 for extrusion applications. This grade is also UV stabilized. 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	Chemical resistant Low temperature impact resistant
Polymer type	PA610 (Polyamide 610)	
Processing technology	Extrusion	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications Industrial Applications	Consumer good application Piping
Colors available	Black	
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	1.04
Water absorption	24 hr, 23°C	ISO 62	%	0.46
Water absorption, saturation			%	1.8

Mechanical properties

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Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	850 / 600
Stress at break		ISO 527-1/-2	MPa	40 / 35
Strain at break		ISO 527-1/-2	%	200 / 200
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	690 / 470
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	100 / 120

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	215
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	51

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Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Flammability, 3.0 mm	3.0 mm	UL 94		HB

*: 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	205 - 225 °C
Compression zone temperature for extrusion	215 - 235 °C
Front zone temperature for extrusion	220 - 240 °C
Die zone temperature for extrusion	215 - 235 °C
Recommended extrusion temperature	205 - 240 °C

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