TECHNYL® SHAPE
For extrusion & blow molding

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL SHAPE D 458P BK

TECHNYL eXten D 458P BLACK

TECHNYL SHAPE D 458P BK 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

Polymer type	PA610	
Certifications	RoHS	EC 1907/2006 (REACH)
Feature	heat-aging stabilized chemical resistant low temperature impact resistant	UV stabilized contains renewable content
Applications	automotive applications industrial applications	consumer applications piping
Colors available	black	
Forms	pellets	
Processing technology	extrusion	

Product identification

ISO 1043 abbreviation	PA610

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm³	1.04
Water absorption	24 hr, 23°C	ISO 62	%	0.46
Water absorption, saturation			%	1.8

TECHNYL® SHAPE
For extrusion & blow molding

DOMO
caring is our formula

TECHNICAL DATA SHEET — **TECHNYL SHAPE D 458P BK**

	Condition	Standard	Unit	Value
Mechanical properties				**dam / cond.***
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/m²	100 / 120

: conditioned according to ISO 1110

	Condition	Standard	Unit	Value
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

	Condition	Standard	Unit	Value
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

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