

TECHNICAL DATA SHEET

**TECHNYL SHAPE DA 438CR BK**

**TECHNYL eXten DA 438CR BLACK**



TECHNYL SHAPE DA 438CR BK is a polyamide 6.10 / PA66 blend, unfilled, for extrusion purpose. It offers excellent compatibility with refrigerants, good resistance to deicing salts, and high burst pressure at temperature around 100°C. It is also suitable for thermoforming and welding. TECHNYL SHAPE DA 438CR BK has been specially design for HVAC lines or refrigerant lines for battery cooling. The results shown are based on an experimental grade. These results will be further enhanced and improved as more industrial lots are produced and statistical data are available.

**General**

Certifications	RoHS	EC 1907/2006 (REACH)
Polymer type	PA610 + PA66 blend	
Feature	heat-aging stabilized impact modified contains renewable content	high viscosity chemical resistant excellent glycol resistant
Applications	automotive applications	pipng
Colors available	black	
Forms	pellets	
Processing technology	extrusion	

**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 <sup>3</sup>	1.1
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	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	3100 / 1700
Stress at break		ISO 527-1/-2	MPa	50 / 55
Strain at break		ISO 527-1/-2	%	18 / 55
Yield stress		ISO 527-1/-2	MPa	80 / 55

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

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

### Processing conditions

Suggested max moisture	0.08 %
Feed zone temperature for extrusion	270 °C
Compression zone temperature for extrusion	290 °C
Front zone temperature for extrusion	290 °C
Die zone temperature for extrusion	285 °C

### Injection notes

The material is supplied in airtight bags, ready for use.,Recommended time 2-4h, recommended water content maximum 0,15% (optimum 0,08%-0,12%)

### Injection advice

For unfilled polyamides, Domo recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.