

TECHNYL® SHAPE DA 438CR BK

DOMO Engineering Plastics - Polyamide 610 + PA 66

General Information

Product Description

*Previously 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

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer • Impact Modifier		
Features	• Chemical Resistant • Heat Aging Resistant • Heat Stabilized	• High Viscosity • Impact Modified • Renewable Resource Content	• Ultra High Glycol Resistance
Uses	• Automotive Applications • Consumer Applications	• Industrial Applications • Piping	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Extrusion		
Resin ID (ISO 1043)	• PA610		

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.10	--	g/cm ³	ISO 1183
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	450000	247000	psi	ISO 527-1
Tensile Stress (Yield)	11600	7980	psi	ISO 527-2
Tensile Stress (Break)	7250	7980	psi	ISO 527-2
Tensile Strain (Break)	18	55	%	ISO 527-2
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.4	--	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	No Break	--		
73°F	No Break	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature ²	424	--	°F	ISO 11357-3
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302

Processing Information

Injection	Dry Unit
Suggested Max Moisture	0.080 %
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%)	
Extrusion	Dry Unit
Cylinder Zone 1 Temp.	500 to 518 °F



Cylinder Zone 2 Temp.	527 to 554 °F
Cylinder Zone 3 Temp.	527 to 554 °F
Cylinder Zone 4 Temp.	527 to 554 °F
Cylinder Zone 5 Temp.	527 to 554 °F
Die Temperature	509 to 545 °F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

