

SANTOPRENE™ 121-60E400 - TPV

Product Description

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance, and is designed for thin wall or complex profile extrusion applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Excellent elasticity and compression set
- Recommended for applications requiring excellent flex fatigue resistance
- Excellent ozone resistance
- Designed for improved UV resistance
- Designed for extruding thin wall sections with excellent definition (down to 0.33 mm [0.013"] radius) and to maximize run length with minimal build-up of material on screen packs or narrow sections of dies

Characteristics

Applications	Automotive - Weather Seals
Uses	Automotive applications, Automotive exterior trim, Outdoor applications
Color	Black
Delivery Form	Pellets
Processing	Extrusion, Profile extrusion, Sheet extrusion

Physical properties	Value	Unit	Test Standard
Density	61.2	lb/ft ³	ASTM D792
Hardness	Value	Unit	
Shore A hardness-TPE, 15s	64		ISO 868
Mechanical properties	Value	Unit	Test Standard
Tensile stress at 100%, perpendicular	348	psi	ISO 37
Tensile stress at break, perpendicular	928	psi	ISO 37
Tensile strain at break, perpendicular	436	%	ISO 37
Compression set, 70 °C, 22h, Type A	20.5	%	ISO 815
Compression set, 125 °C, 70h, Type A	46	%	ISO 815
Extrusion	Value	Unit	
Drying temperature	180	°F	
Drying time	3	h	
Middle temperature	302 - 392	°F	
Melt temperature	351 - 399	°F	
Die head temperature	379	°F	
Back pressure	725 - 2900	psi	

Other text information

Processing Notes

Desiccant drying for 3 hours at 80 °C (180 °F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230 °C (350 to 450 °F) and is incompatible with acetal and PVC.

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Other Approvals

OEM	Specification
Renault	FRM 18-27-208 /---
VW Group	VW50123