

## SANTOPRENE® 121-73W175

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, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

## **Key Features**

- UL listed: file #QMFZ2.E80017, Plastics Component; file #QMFZ8.E80017, Plastics Certified For Canada -Component
- 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

## Typical mechanical properties

Stress at 100% elongation	3.76 MPa	ISO 527-1/-2 or ISO 37
Stress at break	8.69 MPa	ISO 527-1/-2 or ISO 37
Elongation at break	460 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-60 °C	ASTM D 746
Low temperature brittleness	-60 °C	ISO 812
Shore A hardness, 15s	78	ISO 48-4 / ISO 868
Shore A hardness change, after ageing	1	ISO 48-4 / ISO 868
Compression set at 70°C, 24h	34 %	ISO 815
Compression Set, 125°C, 70h	42 %	ISO 815
Tear strength, normal	27 kN/m	n ISO 34-1

### **Flammability**

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	3 mm	UL 94
UL recognition	yes	UL 94

### Electrical properties

Electric Strength, Short Time, 2mm	27 kV/mm	ASTM D 149
Flecing Strength, Short Time, 7mm	// KV/IIIII	-

### Other properties

Density	v 970 ka/m³	ISO 1183
DCHSity	y 370 kg/iii	100 1100

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#### Extrusion

Drying Temperature
Drying Time, Dehumidified Dryer
Melt Temperature Range

82 °C 3 h 177 - 204 °C

## **Processing Texts**

**Processing Notes** 

Desiccant drying for 3 hours at  $80^{\circ}$ C ( $180^{\circ}$ F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to  $230^{\circ}$ C (350 to  $450^{\circ}$ F) and is incompatible with acetal and PVC. Do not exceed 15% drawdown.

## Other Approvals

Other Approvals

OEM	Specification	Additional Information
Stellantis - Chrysler	MS-AR-100 CGV	
Ford	WSS-M2D280-B1	
Ford	WSS-M9P14-A1	MCDCC JA6A
GM	GMW15812, Type 6E	
Stellantis - FCA Group	55248/02	EMP-70
BAIC	BAS-492	
Mercedes-Benz Group (Daimler)	DBL 5562	
Renault	FRM 18-27-039 /C	
Iveco	IVECO 15-5244	EMP-70
Li Auto	Q/LiA5310057	2021 (V2)
MAN	M3236 A7	
Hyundai	MS220-05, Type P	
Bosch	N28 BN34-OX 017	
Stellantis - PSA Group	PMP 01378_15_01942	
Geely	Q/JLY J7110166B	
SAIC Motor	SMTC 5 320 024	
VW Group	TL 526 41C	
VW Group	TL 527 03	
VW Group	VW50123	

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VW Group	VW50123	LD3002 BLK, SP- Sealing CVG INT SP121-73W175- Volkswagen (VW Group)
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