

SANTOPRENE® 121-58W175

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

- 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	1.99 MPa	ISO 527-1/-2 or ISO 37
Stress at break	5.09 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	61	ISO 48-4 / ISO 868
Shore A hardness change, after ageing	-3	ISO 48-4 / ISO 868
Compression set at 70°C, 24h	27 %	ISO 815
Compression Set, 125°C, 70h	43 %	ISO 815
Tear strength, normal	20.6 kN/m	ISO 34-1

Electrical properties

Electric Strength, Short Time, 2mm	26 kV/mm	ASTM D 149
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Other properties

Density	970 kg/m³	ISO 1183
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Extrusion

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	3 h
Melt Temperature Range	177 - 204 °C

Processing Texts

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. Do not exceed 15% drawdown.
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Other Approvals

Other Approvals

OEM	Specification	Additional Information
Stellantis - Chrysler	MS-AR-100 AGV	
Ford	WSS-M2D378-B1	
GM	GMW15812, Type 4E	
Stellantis - PSA Group	PMP 01378_15_01941	
BAIC	BAS-491	
BMW	GS 93042	
Li Auto	Q/LiA5310057	2021 (V2)
Mercedes-Benz Group (Daimler)	DBL 5562	
Stellantis - FCA Group	55248/02	EMP-60
GAC	QJ/GAC 1240.022	
Renault	FRM 18-27-030 /---	
SAIC Motor	SMTC 5 320 024	
VW Group	TL 526 22	MD04
VW Group	TL 526 41C	
VW Group	TL 527 03	
VW Group	VW50123	

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