

SANTOPRENE® 121-80W175

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

- Recommended for applications requiring excellent flex fatigue resistance
- Recommended for applications requiring 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	4.43 MPa	ISO 527-1/-2 or ISO 37
Stress at break	9.13 MPa	ISO 527-1/-2 or ISO 37
Elongation at break	470 %	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	85	ISO 48-4 / ISO 868
Shore A hardness change, after ageing		ISO 48-4 / ISO 868
Compression set at 70°C, 24h	39 %	ISO 815
Compression Set, 125°C, 70h	55 %	ISO 815
Initial Tear Resist., Die C	30.6 kN/m	ISO 34-1

Other properties

Density	966 kg/m ³	ISO 1183
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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
	GM	GMW15812, Type 7E	
	Renault	FRM 18-27-144 /---	
	Iveco	IVECO 15-5244	EMP-80
	Li Auto	Q/LiA5310057	2021 (V2)
	Stellantis - Chrysler	MS-AR-100 DGV	
	GAC	QJ/GAC 1240.022	

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SAIC Motor	SMTC 5 320 024	
VW Group	TL 527 03	
VW Group	VW50123	

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