

SANTOPRENE[®] 123-50W175

SANTOPRENE®

A hard, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in thin wall applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding, extrusion, blow molding, 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

Product information

Resin Identification Part Marking Code	TPV >TPV<		ISO 1043 ISO 11469
Typical mechanical properties			
Yield stress, perpendicular Yield strain, perpendicular Shore D hardness, 15s Initial Tear Resist., Die C	26 51	MPa % kN/m	ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ISO 48-4 / ISO 868 ISO 34-1
Flammability FMVSS Class Burning rate, Thickness 2 mm	B 38.3	mm/min	ISO 3795 (FMVSS 302) ISO 3795 (FMVSS 302)
Physical/Other properties			
Density	950	kg/m³	ISO 1183
Characteristics			
Processing	Injection Moulding, Multi Injection Moulding, Extrusion, Sheet Extrusion, Coextrusion, Blow Moulding, Thermoforming		
Delivery form	Pellets		
Special characteristics	U.V. stabilised or stable to weather		
Additional information			
Injection molding	Holding pressure should be about 50 to 75% of the actual injection pressure. A high screw RPM (100 to 200) is recommended. Back pressure is not always needed, however, a back pressure of 0.3 to 0.7 MPa may be used to ensure a homogeneous melt and maintain a consistent shot size. A higher back pressure is normally employed when using masterbatches.		
Processing Notes	Processing Notes		
	Desiccant drying for 3 hours at 80 TPV has a wide temperature proc 450°F) and is incompatible with a	essing window from 17	
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Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Dongfeng Motor	EQCL-67-2017 TPE 55D	
General Motors	GMW15812P-TPV(EPDM+PP)-Type 10E	N/A
Hyundai	MS220-05 Type R	
Hyundai	MS220-13 Type F-1	
IVECO	IVECO 15-5244	EMP-150
Mercedes-Benz	DBL5562	
Renault	FRM 18-27-038 /, No Spec, Special Part Approval, See Your CE Account Manager.	
Stellantis	55248_02 EMP150	MS-AR-100 HGV
VW Group	VW 50123	

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