

SANTOPRENE® 101-64

SANTOPRENE®

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

Product information

Resin Identification Part Marking Code	TPV >TPV<		ISO 1043 ISO 11469
Tart Marking Gode	>11 V<		100 11403
Rheological properties			
Moulding shrinkage, parallel	3.2 ^[1]		ISO 294-4, 2577
Moulding shrinkage, normal	0.8 ^[1]	%	ISO 294-4, 2577
[1]: 2.0 mm thickness, min. 24 hours after molding, per test method	d TPE-X0080		
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular	2.83	MPa	ISO 37
Stress at break, perpendicular	6.47	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	450	%	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	70		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	25		ISO 815
Compression set, 125°C, 70h	44	, -	ISO 815
Tear strength, normal	23	kN/m	ISO 34-1
Thermal properties			
RTI, electrical, 1.5mm	90	°C	UL 746B
RTI, electrical, 3.0mm		°C	UL 746B
RTI, strength, 1.5mm		°C	UL 746B
RTI, strength, 3.0mm	95	°C	UL 746B
Specific Application Suitability			
Continuous Upper Temperature Resistance, 1000h	135	°C	SAE J2236
Detergent resistance	f3		UL 749
Detergent resistance	f4		UL 2157
Outdoor suitability	f1		UL 746C

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Flammability

Burning Behav. at 1.5mm nom. thickn. HB class IEC 60695-11-10 Thickness tested 1.5 mm IEC 60695-11-10 **UL** recognition **UL 94** yes Burning Behav. at thickness h HB class IEC 60695-11-10 Thickness tested 1 mm IEC 60695-11-10 **UL** recognition **UL 94** ves ISO 3795 (FMVSS 302) Burning rate, Thickness 2 mm 23.7 mm/min

Electrical properties

Relative permittivity, 60Hz

Arc Resistance Performance Level Category

High Amperage Arc Ignition Category, 1.5 mm

2.5

PLC 6 class

UL 746A

UL 746A

Physical/Other properties

Density 970 kg/m³ ISO 1183

Injection

Max. regrind level 20 %
Back pressure 0.517 MPa
Ejection temperature 90 °C

Extrusion

Drying Temperature 82 °C
Drying Time, Dehumidified Dryer 3 h
Melt Temperature Range 196 °C

Characteristics

Processing Injection Moulding, Multi Injection Moulding, Extrusion, Sheet Extrusion,

Coextrusion, Blow Moulding

Delivery form Pellets

Additional information

Non Standard Data

Property Name	Condition	Value	Unit	Standard
Change in Tensile Strength	150°C, 168h	-9.4	%	ISO 188
Change in Tensile Strain at Break	150°C, 168h	-7.7	%	ISO 188
Change in Shore A Hardness	150°C, 168h	1.3	-	ISO 188

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Processing Notes 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.

Automotive

OEM STANDARD ADDITIONAL INFORMATION

BMW GS93042 2022-12

Ford WSD-M2D379-A1

Ford WSS-M9P9-D2 SANTOPRENE101-64_WSS-

M9P9-D2_2022-08-17.pdf

General Motors GMW15813P-TPV-(EPDM+PP)-Type 5 N/A

Hyundai MS220-05 Type B Hyundai MS220-31 Type A1

Mercedes-Benz DBL5562

Renault FRM 18-27-020 /---, No Spec, Special Part

Approval, See Your CE Account Manager.

SAIC Motor SMTC 5 320 024

 Stellantis
 55248_02 EMP70
 MS-AR-100 BGN

VW Group VW 50123

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