

# SANTOPRENE® 201-64

## SANTOPRENE®

A soft, colorable, 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	TPV	ISO 1043
Part Marking Code	>TPV<	ISO 11469

### Rheological properties

Moulding shrinkage, parallel	3.2 <sup>[1]</sup> %	ISO 294-4, 2577
Moulding shrinkage, normal	0.8 <sup>[1]</sup> %	ISO 294-4, 2577

[1]: 2.0 mm thickness, min. 24 hours after molding, per test method TPE-X0080

### Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	2.6 MPa	ISO 37
Tensile stress at break, perpendicular	7 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	450 %	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	69	ISO 48-4 / ISO 868
Compression set, 70 °C, 24h	18 %	ISO 815
Compression set, 125 °C, 70h	44 %	ISO 815
Tear strength, normal	22 kN/m	ISO 34-1

### Thermal properties

RTI, electrical, 1.5mm	100 °C	UL 746B
RTI, electrical, 3.0mm	100 °C	UL 746B
RTI, strength, 1.5mm	90 °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

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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	yes	UL 94
Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	1 mm	IEC 60695-11-10
UL recognition	yes	UL 94
Burning rate, Thickness 2 mm	20 mm/min	ISO 3795 (FMVSS 302)
Hot Wire Ignition, 1.5mm	PLC 2 s	UL 746A
Hot Wire Ignition, 3mm	PLC 2 s	UL 746A

### Electrical properties

Relative permittivity, 60Hz	2.3	IEC 62631-2-1
Comparative tracking index, 23°C	0 PLC	UL 746A
Arc Resistance Performance Level Category	PLC 6 class	UL 746B
High Amperage Arc Ignition Category, 1.5 mm	PLC 0 class	UL 746A

### Physical/Other properties

Density	970 kg/m³	ISO 1183
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### Injection

Max. regrind level	20 %
Back pressure	0.517 MPa

### 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	-12	%	ISO 188
Change in Tensile Strain at Break	150 °C, 168h	6	%	ISO 188
Change in	150 °C, 168h	2	-	ISO 188

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Shore A Hardness				
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## Processing Notes

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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

Ford

General Motors

Stellantis

STANDARD

WSD-M2D379-A1

Natural; Special Parts Approval, See Your CE Account Representative for Further Details.

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ADDITIONAL INFORMATION

MS-AR-100 BGN

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