

**SAE J2236** 

UL 749

UL 2157

# SANTOPRENE® 201-80

## **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, blow molding, thermoforming or vacuum forming. 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

Froduct information			
Resin Identification	TPV		ISO 1043
Part Marking Code	>TPV<		ISO 11469
<b>9</b>			
Rheological properties			
Moulding shrinkage, parallel	1.8 <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	1 TPE-X0080		
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular	4.7	MPa	ISO 37
Stress at break, perpendicular	11.1	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	540	%	ISO 527-1/-2 or ISO 37
Brittleness temperature	-60	°C	ISO 974
Shore A hardness, 15s	86		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	41	%	ISO 815
Compression set, 125°C, 70h	47	%	ISO 815
Tear strength, normal	35	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	100	°C	UL 746B
Specific Application Suitability			

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135 °C

f3

f4

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Continuous Upper Temperature Resistance, 1000h

Detergent resistance

Detergent resistance



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## **SANTOPRENE®**

### Flammability

Burning Behav. at 1.5mm nom. thickn. HB class IEC 60695-11-10 Thickness tested IEC 60695-11-10 1.5 mm **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** yes Burning rate, Thickness 2 mm 16 mm/min ISO 3795 (FMVSS 302) PLC 3 s Hot Wire Ignition, 1.5mm **UL 746A** Hot Wire Ignition, 3mm PLC 2 s **UL 746A** 

## Electrical properties

Relative permittivity, 60Hz

Arc Resistance Performance Level Category

High Amperage Arc Ignition Category, 1.5 mm

2.3

PLC 6 class

UL 746B

UL 746A

### Physical/Other properties

Density 960 kg/m<sup>3</sup> ISO 1183

#### Injection

Max. regrind level 20 % Back pressure 0.517 MPa

### Extrusion

Drying Temperature 82 °C
Drying Time, Dehumidified Dryer 3 h
Melt Temperature Range 202 °C

#### Characteristics

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

Coextrusion, Blow Moulding, Thermoforming

Delivery form Pellets

#### Additional information

Non Standard Data

Property Name	Condition	Value	Unit	Standard
Change in Tensile Strength	150°C, 168h	-5	%	ISO 188
Change in Tensile Strain at Break	150°C, 168h	-12	%	ISO 188
Change in Shore A	150°C, 168h	5	-	ISO 188

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## **SANTOPRENE®**

Hardness				
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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

Ford WSD-M2D381-A1

Stellantis 55248\_02 EMP90 MS-AR-100 DGN

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