

# SANTOPRENE® 201-55

### **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 or extrusion. 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
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular Stress at break, perpendicular Elongation at break, perpendicular Brittleness temperature Brittleness Temperature Shore A hardness, 15s Compression set, 70°C, 24h Compression set, 125°C, 70h Tear strength, normal	5.2 400 -60 -60 59 22 38	°C °C %	ISO 37 ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 ISO 974 ASTM D 746 ISO 48-4 / ISO 868 ISO 815 ISO 815
Thermal properties			
RTI, electrical, 1.5mm RTI, electrical, 3.0mm RTI, strength, 1.5mm RTI, strength, 3.0mm	100 100 90 100	°C °C	UL 746B UL 746B UL 746B UL 746B
Specific Application Suitability			
Continuous Upper Temperature Resistance, 1000h Detergent resistance Detergent resistance	135 f3 f4	°C	SAE J2236 UL 749 UL 2157
Flammability			
Burning Behav. at 1.5mm nom. thickn. Thickness tested UL recognition Burning Behav. at thickness h Thickness tested UL recognition Burning rate, Thickness 2 mm	1.5 yes HB 1 yes 29.6	class mm class mm	IEC 60695-11-10 IEC 60695-11-10 UL 94 IEC 60695-11-10 IEC 60695-11-10 UL 94 ISO 3795 (FMVSS 302)
Hot Wire Ignition, 1.5mm	PLC 3	S	UL 746A

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Hot Wire Ignition, 3mm PLC 2 s UL 746A

## Electrical properties

Relative permittivity, 60Hz

Arc Resistance Performance Level Category
Electric Strength, Short Time, 2mm

High Amperage Arc Ignition Category, 1.5 mm

2.3

PLC 6 class

UL 746B

29 kV/mm

ASTM D 149

PLC 0 class

UL 746A

## Physical/Other properties

Density 970 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 196 °C

#### Additional information

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.

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