

# SANTOPRENE® 201-73

## **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**

Resin Identification	TPV		ISO 1043
Part Marking Code	>TPV<		ISO 11469
<del>-</del>			
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular	3.6	MPa	ISO 37
Stress at break, perpendicular	8.8	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	490		ISO 527-1/-2 or ISO 37
Brittleness temperature	-60	°C	ISO 974
Brittleness Temperature	-60	°C	ASTM D 746
Shore A hardness, 15s	78		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	28		ISO 815
Compression set, 125°C, 70h	37	%	ISO 815
Tear strength, normal	29	kN/m	ISO 34-1
Thermal properties			
RTI, electrical, 1.5mm	100	°C	UL 746B
RTI, electrical, 3.0mm	100		UL 746B
RTI, strength, 1.5mm		°C	UL 746B
RTI, strength, 3.0mm		°C	UL 746B
Specific Application Suitability			
Specific Application Suitability			
Continuous Upper Temperature Resistance, 1000h	135	°C	SAE J2236
Detergent resistance	f3		UL 749
Detergent resistance	f4		UL 2157
Flammability			
Burning Behav. at 1.5mm nom. thickn.	НВ	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	16.7	mm/min	ISO 3795 (FMVSS 302)
Hot Wire Ignition, 1.5mm	PLC 3	S	UL 746A

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Revised: 2024-03-25 Source: Celanese Materials Database



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### **SANTOPRENE®**

Hot Wire Ignition, 3mm PLC 3 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

2.4

PLC 6 class
UL 746B

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 202 °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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