

SANTOPRENE® 201-87

SANTOPRENE®

A hard, 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
Typical machanical properties			
Typical mechanical properties			
Tensile stress at 100% elongation, perpendicular		MPa	ISO 37
Stress at break, perpendicular	_	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	580		ISO 527-1/-2 or ISO 37
Brittleness temperature	-54	_	ISO 974
Brittleness Temperature	-54	°C	ASTM D 746
Shore A hardness, 15s	93		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	36		ISO 815
Compression set, 125°C, 70h	44		ISO 815
Tear strength, normal	48	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	ŭ	UL 749
Detergent resistance	f4		UL 2157
Flammability			
•	LID	-1	IEO 0000E 11 10
Burning Behav. at 1.5mm nom. thickn. Thickness tested		class mm	IEC 60695-11-10 IEC 60695-11-10
		111111	UL 94
UL recognition Burning Behav. at thickness h	yes	class	IEC 60695-11-10
Thickness tested		mm	IEC 60695-11-10
UL recognition	yes	111111	UL 94
Burning rate, Thickness 2 mm	,	mm/min	ISO 3795 (FMVSS 302)
Hot Wire Ignition, 1.5mm	PLC 3		UL 746A
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Printed: 2024-09-02 Page: 1 of 2

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



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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

2.4

PLC 5 class
UL 746B

ASTM D 149

PLC 0 class
UL 746A

Physical/Other properties

Density 960 kg/m³ 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 204 °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.

Printed: 2024-09-02 Page: 2 of 2

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