

SANTOPRENE® 201-87

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.

Typical mechanical properties

Stress at 100% elongation	7.1 MPa	ISO 527-1/-2 or ISO 37
Stress at break	15 MPa	ISO 527-1/-2 or ISO 37
Elongation at break	580 %	ISO 527-1/-2 or ISO 37
Brittleness temperature	-54 °C	ISO 974
Brittleness Temperature	-54 °C	ASTM D 746
Shore A hardness, 15s	93	ISO 48-4 / ISO 868
Shore A hardness change, after ageing	2	ISO 48-4 / ISO 868
Compression set at 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, strength, 1.5mm	90 °C	UL 746B
RTI, strength, 3mm	95 °C	UL 746B

Specific Application Suitability

Detergent resistance	f3	UL 749
Detergent resistance	f4	UL 2157

Flammability

Burning Behav. at thickness h	HB class	UL 94
Thickness tested	3 mm	UL 94
UL recognition	yes	UL 94
Hot Wire Ignition, 1mm	PLC 4 s	UL 746A
Hot Wire Ignition, 1.5mm	PLC 3 s	UL 746A
Hot Wire Ignition, 3mm	PLC 2 s	UL 746A

SANTOPRENE® 201-87

Electrical properties

Comparative tracking index	PLC 0 PLC	UL 746A
Arc Resistance Performance Level Category	PLC 5 class	UL 746B
Electric Strength, Short Time, 2mm	32 kV/mm	ASTM D 149
High Amperage Arc Ignition Category, 1.5 mm	PLC 0 class	UL 746A
High Voltage Arc Tracking Rate	PLC 1 mm/min	UL 746A

Other properties

Density	960 kg/m ³	ISO 1183
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Injection

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	3 h
Processing Moisture Content	0.08 %
Max. regrind level	20 %
Max. mould temperature	10 - 52 °C
Vent depth	25 µm
Back pressure	0.345 - 0.689 MPa
Injection speed	fast

Extrusion

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	3 h
Melt Temperature Range	204 °C

Processing Texts

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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Other Approvals

Other Approvals	OEM	Specification	Additional Information
	Stellantis - Chrysler	MS-AR-100 EGN	
	Ford	WSD-M2D382-A1	
	Mercedes-Benz Group (Daimler)	DBL 5562	

SANTOPRENE® 201-87

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Page: 3 of 3

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