

# SANTOPRENE® 201-64

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 or blow molding. 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	2.6 MPa	ISO 527-1/-2 or ISO 37
Stress at break	7 MPa	ISO 527-1/-2 or ISO 37
Elongation at break	450 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-60 °C	ASTM D 746
Low temperature brittleness	-60 °C	ISO 812
Shore A hardness, 15s	69	ISO 48-4 / ISO 868
Shore A hardness change, after ageing	2	ISO 48-4 / ISO 868
Compression set at 70°C, 24h	18 %	ISO 815
Compression Set, 125°C, 70h	44 %	ISO 815
Tear strength, normal	22 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, 1.5mm	PLC 2 s	UL 746A

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## Electrical properties

Comparative tracking index	PLC 0 PLC	UL 746A
Arc Resistance Performance Level Category	PLC 6 class	UL 746B
Electric Strength, Short Time, 2mm	30 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	970 kg/m <sup>3</sup>	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	196 °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 BGN	
	Stellantis - FCA Group	55248/02	EMP-60

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