

SANTOPRENE® 8201-80

SANTOPRENE®

A soft, colorable, non-hygroscopic 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

- · Non-hygroscopic product, requires little to no drying before processing.
- · Neutral, easy coloring formulation.
- · Recommended for applications requiring excellent ozone resistance.
- · Used in sealing applications.
- $\boldsymbol{\cdot}$ Recommended for applications requiring excellent flex fatigue resistance.
- · UL listed: file #QMFZ2.E80017, Plastics Component; file #QMFZ8.E80017, Plastics Certified For Canada Component.

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 Shore A hardness, 15s Compression set, 70°C, 24h Compression set, 125°C, 70h	4.2 MPa 9.8 MPa 630 % -63 °C 85 35 % 69 %	ISO 37 ISO 527-1/-2 or ISO 37 ISO 527-1/-2 or ISO 37 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 °C 100 °C 90 °C 95 °C	UL 746B UL 746B UL 746B UL 746B
Flammability		
Burning Behav. at 1.5mm nom. thickn. Thickness tested UL recognition Burning Behav. at thickness h Thickness tested UL recognition Hot Wire Ignition, 1.5mm Hot Wire Ignition, 3mm	HB class 1.6 mm yes HB class 1.1 mm yes PLC 3 s PLC 2 s	IEC 60695-11-10 IEC 60695-11-10 UL 94 IEC 60695-11-10 IEC 60695-11-10 UL 94 UL 746A UL 746A

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Electrical properties

Arc Resistance Performance Level Category PLC 5 class UL 746B High Amperage Arc Ignition Category, 1.5 mm PLC 0 class UL 746A

Physical/Other properties

Density 950 kg/m³ ISO 1183

Injection

Processing Moisture Content≤0.08 %Max. regrind level20 %Min. mould temperature24 °CMax. mould temperature52 °CBack pressure0.517 MPa

Extrusion

Melt Temperature Range 191 - 224 °C

Additional information

Processing Notes

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Desiccant drying for 3 hours at 80 °C (180 °F) can be performed if desired. 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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