

SANTOPRENE® 121-50M100

SANTOPRENE®

A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in difficult injection molding applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- Designed for fast, easy injection molding, especially for complex part geometries
- Used in sealing applications
- Recommended for applications requiring improved part surface appearance
- Designed to be injected at lower molding temperatures or at lower injection pressures
- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component

Product information

Resin Identification	TPV	ISO 1043
Part Marking Code	>TPV<	ISO 11469

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	1.8 MPa	ISO 37
Stress at break, perpendicular	4.39 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	465 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-60 °C	ASTM D 746
Shore A hardness, 15s	56	ISO 48-4 / ISO 868
Compression set, 70 °C, 24h	31 %	ISO 815
Compression set, 125 °C, 70h	42 %	ISO 815
Initial Tear Resist., Die C	15 kN/m	ISO 34-1

Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	1.1 mm	IEC 60695-11-10
UL recognition	yes	UL 94
Burning rate, Thickness 2 mm	32.2 mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

Density	915 kg/m ³	ISO 1183
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Injection

Max. regrind level	20 %
Back pressure	0.517 MPa
Ejection temperature	94 °C

Additional information

Processing Notes

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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

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450°F) and is incompatible with acetal and PVC.

Specific volume-temperature (pvT)

