

SANTOPRENE® 8211-55

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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 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

- 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.
- 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	TPV	ISO 1043
Part Marking Code	>TPV<	ISO 11469

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	2.1 MPa	ISO 37
Stress at break, perpendicular	4.6 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	480 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-62 °C	ASTM D 746
Shore A hardness, 15s	59	ISO 48-4 / ISO 868
Compression set, 70 °C, 24h	19 %	ISO 815
Compression set, 125 °C, 70h	49 %	ISO 815

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

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

Physical/Other properties

Density	930 kg/m ³	ISO 1183
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Injection

Max. regrind level	20 %
Back pressure	0.517 MPa
Ejection temperature	84 °C

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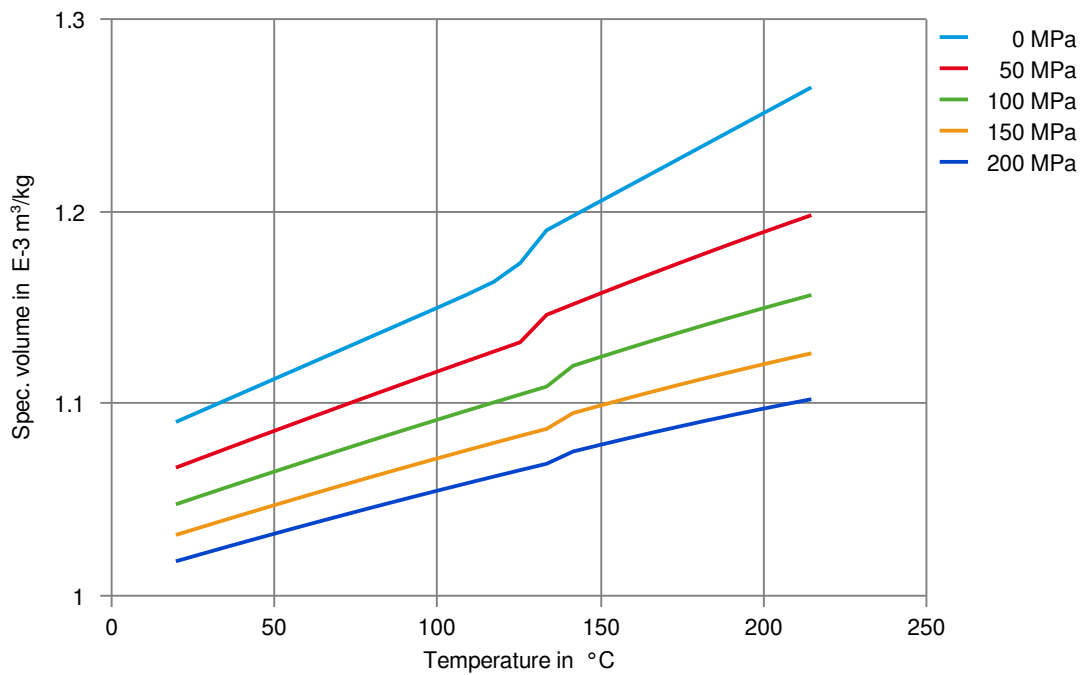
Additional information

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.

Specific volume-temperature (pvT)



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