

SANTOPRENE® 271-55

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A soft, colorable, specialty thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It is designed for use in non fatty food contact applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding or extrusion. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

- This product, in principle, can be used in food contact applications in the USA (FDA). Migration or use limitations may apply.
- Certified by NSF to NSF/ANSI Standard 51: Food Equipment Materials - Plastics, materials and components used in food equipment.
- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component.
- Recommended for applications requiring excellent flex fatigue resistance.

Product information

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

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	1.9 MPa	ISO 37
Stress at break, perpendicular	4.5 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	390 %	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-60 °C	ASTM D 746
Shore A hardness, 15s	59	ISO 48-4 / ISO 868
Compression set, 70 °C, 24h	22 %	ISO 815
Compression set, 125 °C, 70h	38 %	ISO 815

Physical/Other properties

Density	970 kg/m ³	ISO 1183
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Injection

Max. regrind level	20 %
Back pressure	0.517 MPa

Extrusion

Drying Temperature	82 °C
Drying Time, Dehumidified Dryer	3 h
Melt Temperature Range	196 °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 450 °F) and is incompatible with acetal and PVC.

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Printed: 2024-05-15

Page: 2 of 2

Revised: 2024-03-25 Source: Celanese Materials Database

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