Celanese
The chemistry inside innovation™

SANTOPRENE® 273-40

SANTOPRENE®

A hard, 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, extrusion, blow molding, thermoforming or vacuum forming. 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	9	MPa	ISO 37
Stress at break, perpendicular	18	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	610	%	ISO 527-1/-2 or ISO 37
Brittleness Temperature	-50	°C	ASTM D 746
Shore D hardness, 15s	41		ISO 48-4 / ISO 868
Compression set, 70°C, 24h	54	%	ISO 815
Compression set, 125°C, 70h	61	%	ISO 815

Physical/Other properties

Density	940	kg/m³	ISO 1183

Injection

Max. regrind level	20	%
Back pressure	0.517	MPa

Extrusion

Drying Temperature	82	°C
Drying Time, Dehumidified Dryer	3	h
Melt Temperature Range	210	°C

Additional information

Processing Notes

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.

Celanese
The chemistry inside innovation™

SANTOPRENE® 273-40

SANTOPRENE®

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