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# SANTOPRENE® 271-87

## 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 | 7.1 | MPa | ISO 37 |
| Stress at break, perpendicular | 17.6 | MPa | ISO 527-1/-2 or ISO 37 |
| Elongation at break, perpendicular | 580 | % | ISO 527-1/-2 or ISO 37 |
| Brittleness Temperature | -54 | °C | ASTM D 746 |
| Shore A hardness, 15s | 93 | | ISO 48-4 / ISO 868 |
| Compression set, 70°C, 24h | 36 | % | ISO 815 |
| Compression set, 125°C, 70h | 44 | % | ISO 815 |

## Physical/Other properties

| | | | |
|---|---|---|---|
| Density | 960 | 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 | 204 | °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.

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