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SANTOPRENE® RC8001

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A soft, colorable, specialty, non-hygroscopic 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 blow molding. 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) (PNS only). Migration or use limitations may apply.

· Complies with NSF Standard/ANSI 51: Food Equipment Materials - Plastics, materials and components used in food equipment.

· Although not NSF certified, this product has a material supplier form on file with NSF to facilitate evaluation for use in applications
requiring NSF certification.

· Recommended for applications requiring excellent flex fatigue resistance.

· Non-hygroscopic product; requires little to no drying before processing.

· Neutral, easy coloring formulation.

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
Tensile stress at break, perpendicular	5.5	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	400	%	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	56		ISO 48-4 / ISO 868

Physical/Other properties

Density	910	kg/m³	ISO 1183

Characteristics

Processing	Injection Moulding, Multi Injection Moulding, Blow Moulding
Delivery form	Pellets

Additional information

Injection molding	Holding pressure should be about 50 to 75% of the actual injection pressure. A high screw RPM (100 to 200) is recommended. Back pressure is not always needed, however, a back pressure of 0.3 to 0.7 MPa may be used to ensure a homogeneous melt and maintain a consistent shot size. A higher back pressure is normally employed when using masterbatches.
Processing Notes	Processing Notes 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.

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