Celanese
The chemistry inside innovation™

SANTOPRENE® 8291-85TL

SANTOPRENE®

A hard, colorable, specialty thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It is especially formulated to create multilayer constructions offering bonding to textiles, metals, fluoroelastomers and PAs. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for extrusion. It is polyolefin based and recyclable within the manufacturing stream.

Product information

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

Typical mechanical properties

Tensile stress at 100% elongation, perpendicular	4	MPa	ISO 37
Tensile stress at break, perpendicular	9.2	MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	830	%	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	86		ISO 48-4 / ISO 868

Flammability

FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 2 mm	35.6	mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

Density	900	kg/m³	ISO 1183

Characteristics

Processing	Extrusion, Coextrusion
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 4 hours at 70°C (160°F) is recommended. Santoprene® TPV has a wide temperature processing window from 185 to 260°C (365 to 500°F), depending on substrate conditions and residence time, and is incompatible with acetal and PVC.

Automotive

OEM	STANDARD
VW Group	VW 50123