

SANTOPRENE® 8211-55B100

SANTOPRENE®

A soft, colorable, specialty, non-hygroscopic thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It is especially formulated to bond to ABS, PS, PC, PMMA, ASA, PET and PPO/PS blends for applications where hard/soft combinations are required. 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

- Designed for excellent adhesion onto ABS, PS, PC, PMMA and ASA (cold insert or 2K [two-shot] molding).
- Recommended for applications requiring superior part surface appearance.
- Designed for soft touch applications.
- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component.
- Adhesion values can vary according to type of ABS, PS, PC, PMMA, ASA or blends thereof, tool design and processing conditions.

Product information

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

Typical mechanical properties

Tensile stress at break, perpendicular	4.4 MPa	ISO 527-1/-2 or ISO 37
Elongation at break, perpendicular	600 %	ISO 527-1/-2 or ISO 37
Shore A hardness, 15s	57	ISO 48-4 / ISO 868
Compression set, 125°C, 70h	55 %	ISO 815
Change in tensile strength, 100°C, 168h	-28 %	ISO 188
Change in tensile strength, 125°C, 168h	-61 %	ISO 188
Change in tensile strain at break, 100°C, 168h	-14 %	ISO 188
Change in tensile strain at break, 125°C, 168h	-70 %	ISO 188
Change in Shore A hardness, 100°C, 168h	-4	ISO 188
Change in Shore A hardness, 125°C, 168h	8	ISO 188

Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	1.1 mm	IEC 60695-11-10
UL recognition	yes	UL 94
FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 2 mm	45.1 mm/min	ISO 3795 (FMVSS 302)

Physical/Other properties

Density	1040 kg/m ³	ISO 1183
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Injection

Drying Recommended	yes
Drying Temperature	70 °C
Drying Time, Dehumidified Dryer	≥3 h
Processing Moisture Content	≤0.08 %
Melt Temperature Optimum	200 °C

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Min. melt temperature	185 °C
Max. melt temperature	210 °C
Mold Temperature Optimum	35 °C
Min. mould temperature	20 °C
Max. mould temperature	50 °C

Characteristics

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

Additional information

Processing Notes

Processing Notes

Desiccant drying for 3 hours at 70 °C (160 °F) can be performed if desired. For two-shot injection molding, recommended melt temperature is 210 to 230 °C (410 to 445 °F) with mold temperatures of 30 to 50 °C (90 to 125 °F). For insert injection molding, recommended melt temperature is 230 to 250 °C (445 to 485 °F) with mold temperatures of 25 to 50 °C (75 to 125 °F). Because of its inherent nature to bond, this material may, on occasion, agglomerate from shipping and storage. Santoprene® TPV is incompatible with acetal and PVC.

Automotive

OEM	STANDARD
BMW	GS93042
VW Group	VW 50123