

# 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

### 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
Burning rate, Thickness 2 mm	42 mm/min	ISO 3795 (FMVSS 302)

### Physical/Other properties

Density	1040 kg/m <sup>3</sup>	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
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

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### Characteristics

Processing

Injection Moulding, Multi Injection Moulding, Coextrusion

Delivery form

Pellets

### Additional information

Non Standard Data

Property Name	Condition	Value	Unit	Standard
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

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.

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### Automotive

OEM  
BMW  
VW Group

STANDARD  
GS93042  
VW 50123