

SANTOPRENE™ 8211-55B100 - TPV

Product Description

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.

Characteristics

Applications	Automotive - Grips, Automotive - HVAC Flapper Door Seals, Automotive - Interior, Consumer - Electronics, Consumer - Floor Care, Consumer - Kitchen Tools, Consumer - Power Tools, Consumer - Writing Instruments, Consumer Applications, Seals and Gaskets, Soft Touch Grips
Uses	Appliance components, Appliances, Automotive applications, Automotive under the hood, Bonding, Cell phones, Consumer applications, Eyeglass frames, Flexible grips, Kitchenware, Living hinges, Seals, Sporting goods, Strain reliefs, Tie-layer, White goods & small appliances
Agency Ratings	UL QMFZ2, UL QMFZ8
UL File Number	E80017
Color	Natural color
Delivery Form	Pellets
Processing	Coextrusion, Injection molding, Multi injection molding

Physical properties	Value	Unit	Test Standard
Density	1.04	g/cm ³	ASTM D792
Density	1040	kg/m ³	ISO 1183
Hardness	Value	Unit	
Shore A hardness-TPE, 15s	53		ISO 868
Mechanical properties	Value	Unit	Test Standard
Elongation at break elast, perpendicular	600	%	ASTM D412
Tensile strain at break, perpendicular	600	%	ISO 37
Compression set, 125°C, 70h, Type 1, Method B	55	%	ASTM D395
Compression set, 125°C, 70h, Type A	55	%	ISO 815
Aging	Value	Unit	Test Standard
Change in Tensile Strength in Air @ 100 C, 168 h	-28	%	ASTM D573
Change in Tensile Strength in Air @ 100 C, 168 h	-28	%	ISO 188
Change in Tensile Strength in Air @ 125 C, 168 h	-61	%	ASTM D573
Change in Tensile Strength in Air @ 125 C, 168 h	-61	%	ISO 188
Change in Ultimate Elongation in Air @ 100 C, 168 h	-14	%	ASTM D573
Change in Tensile Strain at Break in Air @ 100 C, 168 h	-14	%	ISO 188
Change in Ultimate Elongation in Air @ 125 C, 168 h	-70	%	ASTM D573
Change in Tensile Strain at Break in Air @ 125 C, 168 h	-70	%	ISO 188
Change in Durometer Hardness in Air @ 100 C, 168 h, Shore A	-4	-	ASTM D573
Change in Shore Hardness in Air @ 100 C, 168 h, Shore A	-4	-	ISO 188
Change in Durometer Hardness in Air @ 125 C, 168 h, Shore A	8	-	ASTM D573
Change in Shore Hardness in Air @ 125 C, 168 h, Shore A	8	-	ISO 188

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Flammability	Value	Unit
Flame rating, 1.1 mm	HB	UL 94
Flame rating, 2.9 mm	HB	UL 94

Other text information

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.

Other Approvals

OEM	Specification
GM	GMW15702-250006

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General Disclaimer

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