ExxonMobil

Santoprene™ 8211-55B100

Thermoplastic Vulcanizate

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.

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.

General

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	
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• GM GMW15702-250006		
UL File Number	• E80017		
Color	• Natural Color		
Form(s)	• Pellets		
Processing Method	• Coextrusion	• Injection Molding	• Multi Injection Molding

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	1.04	1.04	ASTM D792
Density	1.04 g/cm³	1.04 g/cm³	ISO 1183

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Shore Hardness			ISO 868
Shore A, 15 sec, 73°F (23°C)	53	53	

Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Elongation at Break - Across Flow (73°F (23°C))	600 %	600 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	600 %	600 %	ISO 37
Compression Set			ASTM D395B
257°F (125°C), 70 hr, Type 1	55 %	55 %	
Compression Set			ISO 815
257°F (125°C), 70 hr, Type A	55 %	55 %	

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Extrusion Notes

Santoprene TPV is incompatible with acetal and PVC. For more information regarding processing and die design, please consult our Extrusion Guide and brochure on "B100, ABS, PC & PS Bondable TPV".

Aging	Typical Value (English)	Typical Value (SI)	Test Based On
Change in Tensile Strength in Air			ASTM D573
212°F (100°C), 168 hr	-28 %	-28 %	
257°F (125°C), 168 hr	-61 %	-61 %	
Change in Tensile Strength in Air			ISO 188
212°F (100°C), 168 hr	-28 %	-28 %	
257°F (125°C), 168 hr	-61 %	-61 %	
Change in Ultimate Elongation in Air			ASTM D573
212°F (100°C), 168 hr	-14 %	-14 %	
257°F (125°C), 168 hr	-70 %	-70 %	
Change in Tensile Strain at Break in Air			ISO 188
212°F (100°C), 168 hr	-14 %	-14 %	
257°F (125°C), 168 hr	-70 %	-70 %	
Change in Durometer Hardness in Air			ASTM D573
Shore A, 212°F (100°C), 168 hr	-4.0	-4.0	
Shore A, 257°F (125°C), 168 hr	8.0	8.0	
Change in Shore Hardness in Air			ISO 188
Shore A, 212°F (100°C), 168 hr	-4.0	-4.0	
Shore A, 257°F (125°C), 168 hr	8.0	8.0	

Flammability	Typical Value (English)	Typical Value (SI)	Test Based On
Flame Rating			UL 94
0.04 in (1.1 mm)	HB	HB	
0.11 in (2.9 mm)	HB	HB	