

Santoprene™ 8191-55B100

Thermoplastic Vulcanizate

Product Description

A soft, black, 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

- UL Listed #QMFZ2.E80017 Plastics Components, #QMFZ8.E80017 Plastics Certified for Canada - Components.
- 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.
- 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
RoHS Compliance	RoHS Compliant		
UL File Number	E80017		
Color	Black		
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/cm ³	1.04 g/cm ³	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 257°F (125°C), 70 hr, Type 1	55 %	55 %	ASTM D395B
Compression Set 257°F (125°C), 70 hr, Type A	55 %	55 %	ISO 815



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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	
0.12 in (3.0 mm)	HB	HB	

