

Santoprene™ 291-60B150

Thermoplastic Vulcanizate

Product Description	Key Features
A colorable, specialty thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. It is especially formulated to bond to PC, ABS, PC/ABS, ASA and PMMA 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 completely recyclable.	<ul style="list-style-type: none"> • Designed for excellent adhesion to PC, ABS, PC/ABS, ASA and PMMA (cold insert or 2K [two-shot] molding). • Broad processing window in injection molding. • Recommended for applications requiring superior part surface appearance. • EU and China RoHS compliant.

General

Availability ¹	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific 	<ul style="list-style-type: none"> • Europe • Latin America 	<ul style="list-style-type: none"> • North America • South America
Applications	<ul style="list-style-type: none"> • Automotive - Plugs, Bumpers, Grommets, Clips • Consumer - Floor Care • Consumer - Kitchen Tools 	<ul style="list-style-type: none"> • Consumer - Power Tools • Consumer - Writing Instruments • Consumer Applications 	<ul style="list-style-type: none"> • Seals and Gaskets • Soft Touch Grips
Uses	<ul style="list-style-type: none"> • Appliance Components • Appliances • Automotive Applications • Automotive Under the Hood • Bonding • Cell Phones 	<ul style="list-style-type: none"> • Consumer Applications • Eyeglass Frames • Flexible Grips • Kitchenware • Living Hinges • Seals 	<ul style="list-style-type: none"> • Sporting Goods • Strain Reliefs • Tie-Layer • White Goods & Small Appliances
Agency Ratings	• EU Annex XVII of Regulation (EC) No 1907/2006		
RoHS Compliance	• RoHS Compliant		
Color	• Natural Color		
Form(s)	• Pellets		
Processing Method	• Coextrusion	• Injection Molding	• Multi Injection Molding
Revision Date	• 08/16/2011		

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
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), 0.0787 in (2.00 mm)	62	62	

Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	305 psi	2.10 MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	305 psi	2.10 MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	856 psi	5.90 MPa	ASTM D412

Typical properties: these are not to be construed as specifications.

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ExxonMobil Chemical Santoprene™ 291-60B150
Thermoplastic Vulcanizate

Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at Break - Across Flow (73°F (23°C))	856 psi	5.90 MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	470 %	470 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	470 %	470 %	ISO 37
Tear Strength - Across Flow (73°F (23°C), Die C)	160 lbf/in	28.0 kN/m	ASTM D624
Tear Strength - Across Flow			ISO 34-1
73°F (23°C), Method Bb, Angle (Nicked)	160 lbf/in	28 kN/m	
Compression Set			ASTM D395B
73°F (23°C), 22.0 hr, Type 1	34 %	34 %	
158°F (70°C), 22.0 hr, Type 1	62 %	62 %	
Compression Set			ISO 815
73°F (23°C), 22.0 hr, Type A	34 %	34 %	
158°F (70°C), 22.0 hr, Type A	62 %	62 %	

Injection Notes

Santoprene TPV is incompatible with acetal and PVC. Please see Quick Processing Reference for 291-XXB150 for further information.

Aging	Typical Value (English)	Typical Value (SI)	Test Based On
Change in Tensile Strength in Air			ASTM D573
212°F (100°C), 168 hr	0.0 %	0.0 %	
Change in Tensile Strength in Air			ISO 188
212°F (100°C), 168 hr	0.0 %	0.0 %	
Change in Ultimate Elongation in Air			ASTM D573
212°F (100°C), 168 hr	-11 %	-11 %	
Change in Tensile Strain at Break in Air			ISO 188
212°F (100°C), 168 hr	-11 %	-11 %	
Change in Durometer Hardness in Air			ASTM D573
Shore A, 212°F (100°C), 672 hr	-2.0	-2.0	
Change in Shore Hardness in Air			ISO 188
Shore A, 212°F (100°C), 672 hr	-2.0	-2.0	
Change in Mass in Air			ASTM D573
212°F (100°C), 168 hr	-1.1 %	-1.1 %	
Change in Mass in Air			ISO 188
212°F (100°C), 168 hr	-1.1 %	-1.1 %	
Change in Volume in Air			ASTM D573
212°F (100°C), 168 hr	-1.2 %	-1.2 %	
Change in Volume in Air			ISO 188
212°F (100°C), 168 hr	-1.2 %	-1.2 %	

Additional Information

Values are for injection molded plaques, fan-gated, 102.0 mm x 152.0 mm x 2.0 mm (4.000" x 6.000" x 0.080").
Tensile strength, elongation and tensile stress are measured across the flow direction - ISO type 1, ASTM die C.
Compression set at 25% deflection.

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Legal Statement

For detailed Product Stewardship information, please contact Customer Service.

This product, including the product name, shall not be used or tested in any medical application without the prior written acknowledgement of ExxonMobil Chemical as to the intended use.

Processing Statement

Desiccant drying for 3 hours at 80°C (180°F) is recommended. Because of its inherent nature to bond, this material may, on occasion, agglomerate from shipping and storage. See Quick Processing Reference on 291-XXB150 and TechNote on "Guidelines for Storage and Handling of Santoprene TPV Bonding Grades".

Notes

¹ Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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