

# Santoprene™ 291-60B150

## Thermoplastic Vulcanizate

### Product Description

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 recyclable within the manufacturing stream.

### Key Features

- 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.

### General

Applications	<ul style="list-style-type: none"> <li>▪ Automotive - Plugs, Bumpers, Grommets, Clips</li> <li>▪ Consumer - Floor Care</li> <li>▪ Consumer - Kitchen Tools</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consumer - Power Tools</li> <li>▪ Consumer - Writing Instruments</li> <li>▪ Consumer Applications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Seals and Gaskets</li> <li>▪ Soft Touch Grips</li> </ul>
Uses	<ul style="list-style-type: none"> <li>▪ Appliance Components</li> <li>▪ Appliances</li> <li>▪ Automotive Applications</li> <li>▪ Automotive Under the Hood</li> <li>▪ Bonding</li> <li>▪ Cell Phones</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consumer Applications</li> <li>▪ Eyeglass Frames</li> <li>▪ Flexible Grips</li> <li>▪ Kitchenware</li> <li>▪ Living Hinges</li> <li>▪ Seals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sporting Goods</li> <li>▪ Strain Reliefs</li> <li>▪ Tie-Layer</li> <li>▪ White Goods &amp; Small Appliances</li> </ul>
RoHS Compliance	▪ RoHS Compliant		
Automotive Specifications	▪ GM GMW15702-250012		
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	1.06	1.06	ASTM D792
Density	1.06 g/cm <sup>3</sup>	1.06 g/cm <sup>3</sup>	ISO 1183

Hardness	Typical Value (English)	Typical Value (SI)	Test Based On
Shore Hardness			ISO 868
Shore A, 15 sec, 73°F (23°C)	65	65	

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))	1160 psi	8.00 MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	1160 psi	8.00 MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	540 %	540 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	540 %	540 %	ISO 37
Compression Set			ASTM D395B
73°F (23°C), 22 hr, Type 1	34 %	34 %	
158°F (70°C), 22 hr, Type 1	62 %	62 %	
Compression Set			ISO 815
73°F (23°C), 22 hr, Type A	34 %	34 %	
158°F (70°C), 22 hr, Type A	62 %	62 %	



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

