

Santoprene™ 291-75B150

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.
- UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component.

General

Applications	▪ Automotive - Plugs, Bumpers, Grommets, Clips ▪ 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		
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	1.10	1.10	ASTM D792
Density	1.10 g/cm ³	1.10 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)	74	74	

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Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	464 psi	3.20 MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	464 psi	3.20 MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	2230 psi	15.4 MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	2230 psi	15.4 MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	640 %	640 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	640 %	640 %	ISO 37
Compression Set			ASTM D395B
73°F (23°C), 22 hr, Type 1	37 %	37 %	
158°F (70°C), 22 hr, Type 1	68 %	68 %	
Compression Set			ISO 815
73°F (23°C), 22 hr, Type A	37 %	37 %	
158°F (70°C), 22 hr, Type A	68 %	68 %	

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	-8.0 %	-8.0 %	ASTM D573
Change in Tensile Strength in Air 212°F (100°C), 168 hr	-8.0 %	-8.0 %	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

Flammability	Typical Value (English)	Typical Value (SI)	Test Based On
Flame Rating			UL 94
0.06 in (1.6 mm)	HB	HB	
0.08 in (2.1 mm)	HB	HB	

Additional Information

Where applicable, test results based on fan gated, injection molded plaques.

Tensile strength, elongation and tensile stress are measured across the flow direction - ISO type 1, ASTM die C.

Compression set at 25% deflection.

All products purchased directly from an ExxonMobil affiliate in Europe are REACH compliant. For products not imported into Europe by ExxonMobil, customers should assess their legal responsibilities under REACH.

Legal Statement

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. For detailed Product Stewardship information, please contact Customer Service.

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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 Tips from Technology - Guidelines for Storage and Handling of Santoprene TPV Bonding Grades.