

# Santoprene™ 8221-85M300

## Thermoplastic Vulcanizate

Product Description	Key Features
A hard, colorable, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is designed for automotive interior applications requiring low fogging and good appearance. This grade of Santoprene TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. It is polyolefin based and completely recyclable.	<ul style="list-style-type: none"> <li>• Neutral, easy coloring formulation.</li> <li>• Excellent ozone resistance.</li> <li>• Used in sealing applications.</li> <li>• Recommended for applications requiring excellent flex fatigue resistance.</li> <li>• EU and China RoHS compliant.</li> </ul>

General			
Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>• Africa &amp; Middle East</li> <li>• Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>• Europe</li> <li>• Latin America</li> </ul>	<ul style="list-style-type: none"> <li>• North America</li> <li>• South America</li> </ul>
Applications	<ul style="list-style-type: none"> <li>• Automotive - Grips</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive - Interior</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive - Interior Mat</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Automotive Applications</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive Interior Parts</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor Applications</li> </ul>
Agency Ratings	<ul style="list-style-type: none"> <li>• EU Annex XVII of Regulation (EC) No 1907/2006</li> </ul>		
RoHS Compliance	<ul style="list-style-type: none"> <li>• RoHS Compliant</li> </ul>		
Automotive Specifications	<ul style="list-style-type: none"> <li>• CHRYSLER MS-AR27 Type C</li> <li>• FORD WSS-M2D381-A4</li> </ul>	<ul style="list-style-type: none"> <li>• GM GMP.E/P.142</li> </ul>	
Color	<ul style="list-style-type: none"> <li>• Natural Color</li> </ul>		
Form(s)	<ul style="list-style-type: none"> <li>• Pellets</li> </ul>		
Processing Method	<ul style="list-style-type: none"> <li>• Injection Molding</li> </ul>	<ul style="list-style-type: none"> <li>• Multi Injection Molding</li> </ul>	
Revision Date	<ul style="list-style-type: none"> <li>• 06/08/2011</li> </ul>		

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Specific Gravity	0.920	0.920	ASTM D792
Density	0.920 g/cm <sup>3</sup>	0.920 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), 0.0787 in (2.00 mm)	85	85	

Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	653 psi	4.50 MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	653 psi	4.50 MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	1310 psi	9.00 MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	1310 psi	9.00 MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	500 %	500 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	500 %	500 %	ISO 37

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

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# ExxonMobil Chemical Santoprene™ 8221-85M300 Thermoplastic Vulcanizate

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Brittleness Temperature	-74 °F	-59 °C	ASTM D746
Brittleness Temperature	-74 °F	-59 °C	ISO 812

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	3.0 hr	3.0 hr

## Injection Notes

Santoprene TPV is incompatible with acetal and PVC. For more information regarding processing and mold design, please consult our Injection Molding Guide.

## 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.  
Not recommended for hot oil.

## 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. Santoprene TPV has a wide temperature processing window from 175 to 230°C (350 to 450°F) and is incompatible with acetal and PVC. For more information, please consult our Material Safety Data Sheet and Injection Molding Guide.

## Notes

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

For additional technical, sales and order assistance:

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