

# Santoprene™ 121-60M200

## Thermoplastic Vulcanizate

Product Description	Key Features
A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is specially formulated with high flow properties and excellent aesthetics for use in injection molded parts such as automotive glass encapsulation. This grade of Santoprene™ TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding. It is polyolefin based and recyclable within the manufacturing stream.	<ul style="list-style-type: none"> <li>Designed for fast, easy injection molding, especially for complex part geometries.</li> <li>Designed to be injected at lower molding temperatures or at lower injection pressures.</li> <li>Designed with higher gloss to allow for a wider range of gloss tailoring via mold surface.</li> <li>Recommended for applications requiring superior part surface appearance with minimal to no flow defects or tiger stripes</li> </ul>

General	
Availability <sup>1</sup>	<ul style="list-style-type: none"> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> <li>North America</li> </ul>
Applications	<ul style="list-style-type: none"> <li>Automotive - Glass Encapsulation</li> <li>Automotive - Seals and Gaskets</li> <li>Automotive - Weather Seals</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Automotive Applications</li> <li>Outdoor Applications</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Automotive Specifications	<ul style="list-style-type: none"> <li>GM GMW15812, Type 5M</li> </ul>
Color	<ul style="list-style-type: none"> <li>Black</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> <li>Multi Injection Molding</li> </ul>
Revision Date	<ul style="list-style-type: none"> <li>10/01/2017</li> </ul>

Physical	Typical Value (English)	Typical Value (SI)	Test Based On
Density / Specific Gravity	0.950	0.950	ASTM D792
Density	0.950 g/cm <sup>3</sup>	0.950 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)	61	61	

Elastomers	Typical Value (English)	Typical Value (SI)	Test Based On
Tensile Stress at 100% - Across Flow (73°F (23°C))	299 psi	2.06 MPa	ASTM D412
Tensile Stress at 100% - Across Flow (73°F (23°C))	299 psi	2.06 MPa	ISO 37
Tensile Strength at Break - Across Flow (73°F (23°C))	595 psi	4.10 MPa	ASTM D412
Tensile Stress at Break - Across Flow (73°F (23°C))	595 psi	4.10 MPa	ISO 37
Elongation at Break - Across Flow (73°F (23°C))	380 %	380 %	ASTM D412
Tensile Strain at Break - Across Flow (73°F (23°C))	380 %	380 %	ISO 37
Tear Strength - Across Flow 73°F (23°C), Method Ba, Angle (Unnicked)	100 lbf/in	18 kN/m	ISO 34-1
Compression Set			ASTM D395B
158°F (70°C), 22 hr, Type 1	28 %	28 %	
212°F (100°C), 70 hr, Type 1	33 %	33 %	
257°F (125°C), 70 hr, Type 1	44 %	44 %	
Compression Set			ISO 815
158°F (70°C), 22 hr, Type A	28 %	28 %	
212°F (100°C), 70 hr, Type A	33 %	33 %	
257°F (125°C), 70 hr, Type A	44 %	44 %	

## Santoprene™ 121-60M200

Thermoplastic Vulcanizate

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

### 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

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. 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 Safety Data Sheet.

### Notes

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

<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: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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