

# Santoprene™ 8221-85M300

## Thermoplastic Vulcanizate

#### **Product Description**

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 recyclable within the manufacturing stream.

#### Key Features

- Neutral, easy coloring formulation.
- Excellent ozone resistance.
- Used in sealing applications.
- Recommended for applications requiring excellent flex fatigue resistance.
- Designed for improved UV resistance.

| General   |   |            |                           |   |                    |
|---|---|------------|---------------------------|---|--------------------|
| Availability <sup>1</sup>                             |   |            | Europe<br>Latin America   | <ul> <li>North America</li> </ul>             |                    |
| Applications  | Automotive - Grips                          |            | Automotive - Interior     | <ul> <li>Automotive - Interior Mat</li> </ul> |                    |
| Uses  | <ul> <li>Automotive Applications</li> </ul> |            | Automotive Interior Parts | <ul> <li>Outdoor Applications</li> </ul>      |                    |
| RoHS Compliance                                       | <ul> <li>RoHS Compliant</li> </ul>          |            |                           |   |                    |
| Automotive Specifications                             | <ul> <li>CHRYSLER MS-AR-<br/>HF</li> </ul>  | 100 DMV2-• | FORD WSS-M2D510-A8        | •   | GM GMW15702-250024 |
| Color   | <ul> <li>Natural Color</li> </ul>           |            |                           |   |                    |
| Form(s)   | <ul> <li>Pellets</li> </ul>                 |            |                           |   |                    |
| Processing Method                                     | <ul> <li>Injection Molding</li> </ul>       | •          | Multi Injection Molding   |   |                    |
| Revision Date   | • 06/20/2014                                |            |                           |   |                    |
| Physical  | Typical Value                               | (English)  | Typical Value             | (SI)  | Test Based On      |
| Density / Specific Gravity                            | 0.920                                       |            | 0.920                     |   | ASTM D792          |
| Density   | 0.920                                       | g/cm³      | 0.920                     | g/cm³   | ISO 1183           |
| Hardness  | Typical Value                               | (English)  | Typical Value             | (SI)  | Test Based On      |
| Shore Hardness  | 71  | · 5 /      | 71                        | ,   | ISO 868            |
| Shore A, 15 sec, 73°F (23°C)                          | 84  |            | 84                        |   |                    |
| Elastomers  | Typical Value                               | (English)  | Typical Value             | (SI)  | Test Based On      |
| Tensile Stress at 100% - Across Flow (73°F (23°C))    | 595   | psi        | 4.10                      | MPa   | ASTM D412          |
| Tensile Stress at 100% - Across Flow (73°F (23°C))    | 595   | psi        | 4.10                      | 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             |
| -<br>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            |
| njection  | Typical Value                               | (English)  | Typical Value             | (SI)  |                    |
| Drying Temperature                                    | 180   | °F         | 82                        | °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.

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#### Additional Information

Where applicable, test results based on fan gated, 2.0 mm injection molded plaques. Tensile strength, elongation and tensile stress are measured across the flow direction. Test results are generated by ExxonMobil test methods that may not fully conform to the ASTM and/or ISO methods. Test methods are available upon request. Not recommended for hot oil. 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 and Injection Molding Guide.

#### 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

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