

Santoprene™ 121-70M350

Thermoplastic Vulcanizate

| Product Description | Key Features |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A soft, black, UV resistant thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material is designed for gap filler applications requiring scratch resistance 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"> Designed for fast, easy injection molding, especially for complex part geometries. Used in sealing applications. Recommended for applications requiring superior part surface appearance. Designed to be injected at lower molding temperatures or at lower injection pressures. EU and China RoHS compliant. |

| General | | | |
|---------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Availability ¹ | <ul style="list-style-type: none"> Africa & Middle East Asia Pacific | <ul style="list-style-type: none"> Europe Latin America | <ul style="list-style-type: none"> North America South America |
| Agency Ratings | <ul style="list-style-type: none"> EU Annex XVII of Regulation (EC) No 1907/2006 | | |
| RoHS Compliance | <ul style="list-style-type: none"> RoHS Compliant | | |
| Color | <ul style="list-style-type: none"> Black | | |
| Form(s) | <ul style="list-style-type: none"> Pellets | | |
| Processing Method | <ul style="list-style-type: none"> Injection Molding | <ul style="list-style-type: none"> Multi Injection Molding | |
| Revision Date | <ul style="list-style-type: none"> 03/20/2008 | | |

| Physical | Typical Value (English) | Typical Value (SI) | Test Based On |
|------------------|-------------------------|-------------------------|---------------|
| Specific Gravity | 0.930 | 0.930 | ASTM D792 |
| Density | 0.930 g/cm ³ | 0.930 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), 0.0787 in (2.00 mm) | 70 | 70 | |

| Elastomers | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------------------------------|-------------------------|--------------------|---------------|
| Tensile Stress at 100% - Across Flow (73°F (23°C)) | 377 psi | 2.60 MPa | ASTM D412 |
| Tensile Stress at 100% - Across Flow (73°F (23°C)) | 377 psi | 2.60 MPa | ISO 37 |
| Tensile Strength at Break - Across Flow (73°F (23°C)) | 899 psi | 6.20 MPa | ASTM D412 |
| Tensile Stress at Break - Across Flow (73°F (23°C)) | 899 psi | 6.20 MPa | ISO 37 |
| Elongation at Break - Across Flow (73°F (23°C)) | 480 % | 480 % | ASTM D412 |
| Tensile Strain at Break - Across Flow (73°F (23°C)) | 480 % | 480 % | ISO 37 |
| Compression Set | | | ASTM D395B |
| 158°F (70°C), 22.0 hr, Type 1 | 40 % | 40 % | |
| Compression Set | | | ISO 815 |
| 158°F (70°C), 22.0 hr, Type A | 40 % | 40 % | |

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

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ExxonMobil Chemical Santoprene™ 121-70M350 Thermoplastic Vulcanizate

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.

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

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

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