

Vistamaxx™ 3980FL

Propylene-based Elastomer

| Product Description | Key Features |
|---|--|
| Vistamaxx 3980FL propylene-based elastomer is an olefinic elastomer primarily composed of isotactic propylene repeat units with random ethylene distribution. It is produced using ExxonMobil Chemical's proprietary metallocene catalyst technology. The 'FL' designates this product passes ExxonMobil Chemical's test for film appearance with regard to gels, as needed for performance film applications ('A' rating). | <ul style="list-style-type: none"> Suitable for a wide range of cast and blown film, molding and various polymer modification and compounding applications. Can be blended with PP, PE and other polyolefins to reduce stress-whitening and improve impact properties. Excellent adhesion to conventional and metallocene PP and PE for exceptional extrusion coating, lamination and tie-layer performance. Very low seal initiation temperature combined with high seal strength when used as a sealing layer of co-extruded structures. Good optical properties. Good chemical resistance to aqueous systems and non-hydrocarbon based fluids. May be used in food contact applications (see FDA and EU notes). Although not NSF certified, this product has a Material Supplier Form on file with NSF to facilitate its evaluation for use in applications requiring NSF certification. 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 |
| Applications | <ul style="list-style-type: none"> Blown Film Cast Film | <ul style="list-style-type: none"> Compounding Molding | <ul style="list-style-type: none"> Polymer Modification |
| Uses | <ul style="list-style-type: none"> Compounding | <ul style="list-style-type: none"> Film | <ul style="list-style-type: none"> Packaging |
| RoHS Compliance | <ul style="list-style-type: none"> RoHS Compliant | | |
| Form(s) | <ul style="list-style-type: none"> Pellets | | |
| Revision Date | <ul style="list-style-type: none"> 08/06/2013 | | |

| Physical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---|-------------------------|-------------------------|-------------------|
| Density ² | 0.878 g/cm ³ | 0.878 g/cm ³ | ASTM D1505 |
| Melt Index ² (190°C/2.16 kg) | 3.7 g/10 min | 3.7 g/10 min | ASTM D1238 |
| Melt Mass-Flow Rate (MFR) ² | 8 g/10 min | 8 g/10 min | ExxonMobil Method |
| Ethylene Content | 9 wt% | 9 wt% | ExxonMobil Method |

| Hardness | Typical Value (English) | Typical Value (SI) | Test Based On |
|------------------------------|-------------------------|--------------------|---------------|
| Durometer Hardness (Shore D) | 40 | 40 | ASTM D2240 |

| Mechanical | Typical Value (English) | Typical Value (SI) | Test Based On |
|---------------------------|-------------------------|--------------------|-------------------|
| Tensile Stress at 100% | 818 psi | 5.64 MPa | ASTM D638 |
| Tensile Stress at 300% | 820 psi | 5.65 MPa | ASTM D638 |
| Tensile Strength at Yield | 981 psi | 6.76 MPa | ASTM D638 |
| Tensile Strength at Break | 2500 psi | 17.2 MPa | ASTM D638 |
| Tensile Set | 85 % | 85 % | ExxonMobil Method |

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

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**ExxonMobil Chemical Vistamaxx™ 3980FL
Propylene-based Elastomer**

| Mechanical | Typical Value (English) | Typical Value (SI) | Test Based On |
|------------------------------|-------------------------|--------------------|---------------|
| Elongation at Yield | 30 % | 30 % | ASTM D638 |
| Elongation at Break | 1682 % | 1682 % | ASTM D638 |
| Flexural Modulus - 1% Secant | 16000 psi | 110 MPa | ASTM D790 |

| Elastomers | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------|-------------------------|--------------------|---------------|
| Tear Strength (Die C) | 464 lbf/in | 81.3 kN/m | ASTM D624 |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature | 170 °F | 76.7 °C | ExxonMobil Method |

Additional Information

In accordance with FDA Food Contact Notification (FCN) 832, this product may be used as articles or components of articles used in contact with all food types under Conditions of Use B through H, as described in Table 2 of 21 CFR 176.170(c).

The base resin in this product is listed in the Chinese Positive List for allowed resins in food packaging materials (issued by China MoH, 11 Oct 2011) and additives that may be present in this product are authorized according to the National Standard of People's Republic of China GB9685-2008, Hygienic Standards for Uses of Additives in Food Containers and Packaging Materials.

EU Note: The composition of this product complies with the requirements for use in contact with food of EU Regulation 10/2011. Please contact Customer Service for the official food law certificates which provide more detailed information.

For data specific to chemical resistance, refer to the Technical Literature (TL), "Chemical Resistance of Vistamaxx Propylene-based Elastomers".

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

Vistamaxx propylene-based elastomer has a wide temperature processing window. A good starting point for temperatures is 10°C above the highest melting point. This material does not require drying and can be compounded or used in a dry blend. Use conventional processing knowledge to ensure mixing of the materials.

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.

² Property specified in conventional unit of measure.

For additional technical, sales and order assistance:

Worldwide and the Americas

ExxonMobil Chemical Company
13501 Katy Freeway
Houston, TX 77079-1398
USA
1-281-870-6050

Asia Pacific

ExxonMobil Chemical Asia Pacific
1 HarbourFront Place
#06-00 HarbourFront Tower One
Singapore 098633
+66-2-1638699

Europe, Middle East and Africa

ExxonMobil Chemical Europe
Hermeslaan 2
1831 Machelen, Belgium
420-239-016-274

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