

ExxonMobil™ LLDPE LL 1236 Series

Linear Low Density Polyethylene Resin

Product Description

ExxonMobil™ LL 1236 Series are ethylene 1-butene linear low density polyethylene resins with increased stiffness and a higher melt index. These resins can be used alone or as a component in blown or cast packaging and industrial film.

General

| | |
|---------------------------|---|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> LL 1236.85: Antiblock: No; Slip: 400 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes LL 1236.86: Antiblock: 6000 ppm; Slip: 1500 ppm; Processing Aid: Yes; Thermal Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Blown Film Bread Bags Cast Film Food Packaging Packaging Films Paper Overwrap Zipper Bag |
| Form(s) | <ul style="list-style-type: none"> Pellets |
| Revision Date | <ul style="list-style-type: none"> 06/11/2020 |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density | 0.925 g/cm ³ | 0.925 g/cm ³ | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 3.6 g/10 min | 3.6 g/10 min | ASTM D1238 |
| Peak Melting Temperature | 253 °F | 123 °C | ExxonMobil Method |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature | 212 °F | 100 °C | ExxonMobil Method |

| Film Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD | 1500 psi | 10 MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1500 psi | 10 MPa | ASTM D882 |
| Tensile Strength at Break MD | 5800 psi | 40 MPa | ASTM D882 |
| Tensile Strength at Break TD | 3600 psi | 25 MPa | ASTM D882 |
| Elongation at Break MD | 530 % | 530 % | ASTM D882 |
| Elongation at Break TD | 810 % | 810 % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 30000 psi | 200 MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 33000 psi | 220 MPa | ASTM D882 |
| Dart Drop Impact | < 60 g | < 60 g | ASTM D1709A |
| Elmendorf Tear Strength MD | 30 g | 30 g | ASTM D1922 |
| Elmendorf Tear Strength TD | 280 g | 280 g | ASTM D1922 |
| Puncture Force | 6 lbf | 28 N | ExxonMobil Method |
| Puncture Energy | 14 in-lb | 1.6 J | ExxonMobil Method |

| Optical Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------|-------------------------|--------------------|---------------|
| Gloss | 91 | 91 | ASTM D2457 |
| Haze | 2.3 % | 2.3 % | ASTM D1003 |

Legal Statement

This product is not intended for use in medical applications and should not be used in any such applications.

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

Processing Statement

Film (0.8 mil / 20 micron) made from LL 1236.85 resin on a 3.5 inch cast film line with a 8.25 in (21 cm) melt curtain, 80°F (27°C) chill roll temperature at a 365 ft/min (111 m/min) take-off speed and a melt temperature of 527°F (275°C).

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Notes

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

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.

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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