

ExxonMobil™ LD 1629 Series

(Legacy name: ExxonMobil™ LDPE LD 117 Series)

Low Density Polyethylene

Product Description

ExxonMobil™ LD 1629 are homopolymer film resins with good clarity and excellent stiffness. Film made from LD 1629 resins can be used in overwrap applications and in push-through type packaging equipment. With a narrow die gap, film produced from LD 1629 resins can be drawn down to 1.0 mil gauge.

General

| | |
|---------------------------|---|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> LD 1629.JJ: Antiblock: 1000 ppm; Slip: 250 ppm; Thermal Stabilizer: Yes LD 1629.NM: Antiblock: No; Slip: No; Thermal Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Bread Bags Co-Extrusion Films Collation Shrink Diaper Backsheet Foams High Performance Collation Shrink Hygiene Packaging Label Film Lamination Film Overwrap Film Paper Overwrap |
| Revision Date | <ul style="list-style-type: none"> 06/17/2020 |

| Resin Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density | 0.929 g/cm ³ | 0.929 g/cm ³ | ASTM D1505 |
| Melt Index (190°C/2.16 kg) | 1.6 g/10 min | 1.6 g/10 min | ASTM D1238 |
| Peak Melting Temperature | 241 °F | 116 °C | ExxonMobil Method |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature | 219 °F | 104 °C | ExxonMobil Method |

| Film Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD | 2000 psi | 14 MPa | ASTM D882 |
| Tensile Strength at Yield TD | 2300 psi | 16 MPa | ASTM D882 |
| Tensile Strength at Break MD | 3600 psi | 25 MPa | ASTM D882 |
| Tensile Strength at Break TD | 2600 psi | 18 MPa | ASTM D882 |
| Elongation at Break MD | 170 % | 170 % | ASTM D882 |
| Elongation at Break TD | 510 % | 510 % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 46000 psi | 320 MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 54000 psi | 380 MPa | ASTM D882 |
| Dart Drop Impact | 80 g | 80 g | ASTM D1709A |
| Elmendorf Tear Strength MD | 190 g | 190 g | ASTM D1922 |
| Elmendorf Tear Strength TD | 240 g | 240 g | ASTM D1922 |
| Puncture Force | 7 lbf | 31 N | ExxonMobil Method |
| Puncture Energy | 3.0 in-lb | 0.34 J | ExxonMobil Method |

| Optical Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------|-------------------------|--------------------|---------------|
| Gloss (45°) | 68 | 68 | ASTM D2457 |
| Haze | 7.1 % | 7.1 % | ASTM D1003 |

Legal Statement

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

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

Processing Statement

Film (1.5 mil/38.1 micron) made from LD 1629 resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 350-370°F (177-188°C), a 30 mil (0.76 mm) die gap at a rate of 8 lbs/hr/in die circumference (1.43 kg/hr/cm).

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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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