

ExxonMobil™ LDPE LD 313.NF

Low Density Polyethylene Resin

Product Description

ExxonMobil™ LD 313.NF is a 3 wt% vinyl acetate copolymer. The vinyl acetate content of this resin provides good heat sealing and good cold temperature toughness when compared to LDPE homopolymers.

General

| | |
|---------------------------|---|
| Availability ¹ | <ul style="list-style-type: none"> Latin America North America |
| Additive | <ul style="list-style-type: none"> Antiblock: 2500 ppm Slip: 800 ppm Thermal Stabilizer: Yes |
| Applications | <ul style="list-style-type: none"> Carpet Backing Co-Extrusion Films Foams Form Fill And Seal Packaging Freezer Film High Clarity Film Lamination Film |
| Form(s) | <ul style="list-style-type: none"> Pellets |
| Revision Date | <ul style="list-style-type: none"> 06/17/2020 |

| 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) | 2.5 g/10 min | 2.5 g/10 min | ASTM D1238 |
| Vinyl Acetate Content | 3.0 wt% | 3.0 wt% | ExxonMobil Method |
| Peak Melting Temperature | 223 °F | 106 °C | ExxonMobil Method |

| Thermal | Typical Value (English) | Typical Value (SI) | Test Based On |
|-----------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature | 191 °F | 88.4 °C | ExxonMobil Method |

| Film Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD | 1300 psi | 8.9 MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1300 psi | 9.2 MPa | ASTM D882 |
| Tensile Strength at Break MD | 3400 psi | 23 MPa | ASTM D882 |
| Tensile Strength at Break TD | 2800 psi | 19 MPa | ASTM D882 |
| Elongation at Break MD | 190 % | 190 % | ASTM D882 |
| Elongation at Break TD | 520 % | 520 % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 21000 psi | 150 MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 25000 psi | 170 MPa | ASTM D882 |
| Dart Drop Impact | 120 g | 120 g | ASTM D1709A |
| Elmendorf Tear Strength MD | 240 g | 240 g | ASTM D1922 |
| Elmendorf Tear Strength TD | 150 g | 150 g | ASTM D1922 |
| Puncture Force | 6 lbf | 28 N | ExxonMobil Method |
| Puncture Energy | 3.7 in-lb | 0.42 J | ExxonMobil Method |

| Optical Properties | Typical Value (English) | Typical Value (SI) | Test Based On |
|--------------------|-------------------------|--------------------|---------------|
| Gloss (45°) | 77 | 77 | ASTM D2457 |
| Haze | 5.1 % | 5.1 % | 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 313.NF resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 340-360°F (171-182°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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Low Density Polyethylene Resin**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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