# ExxonMobil™ LLDPE LL 1001.32

## Linear Low Density Polyethylene Resin

### Product Description

ExxonMobil™ LL 1001.32 is an ethylene 1-butene linear low density polyethylene resin. Films made from LL 1001.32 resin have very good tensile and toughness properties.

### General

| | | | |
|---|---|---|---|
| Availability [1] | ▪ Latin America | ▪ North America | |
| Additive | ▪ Antiblock: No<br>▪ Slip: No | ▪ Processing Aid: No<br>▪ Thermal Stabilizer: Yes | |
| Applications | ▪ Cast Film<br>▪ Cast Stretch Film<br>▪ Industrial Liners | ▪ Liners<br>▪ Produce Bags<br>▪ Refuse Bags | ▪ Trash Bags |
| Form(s) | ▪ Pellets | | |
| Revision Date | ▪ 06/11/2020 | | |

| Resin Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Density / Specific Gravity | 0.918 | g/cm³ | 0.918 | g/cm³ | ASTM D792 |
| Melt Index (190°C/2.16 kg) | 1.0 | g/10 min | 1.0 | g/10 min | ASTM D1238 |
| Peak Melting Temperature | 250 | °F | 121 | °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 | 1200 | psi | 8.3 | MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1200 | psi | 8.4 | MPa | ASTM D882 |
| Tensile Strength at Break MD | 8500 | psi | 60 | MPa | ASTM D882 |
| Tensile Strength at Break TD | 4300 | psi | 30 | MPa | ASTM D882 |
| Elongation at Break MD | 390 | % | 390 | % | ASTM D882 |
| Elongation at Break TD | 850 | % | 850 | % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 20000 | psi | 140 | MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 23000 | psi | 160 | 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 | 450 | g | 450 | g | ASTM D1922 |
| Puncture Force | 8 | lbf | 36 | N | ExxonMobil Method |
| Puncture Energy | 23 | in·lb | 2.6 | J | ExxonMobil Method |

| Optical Properties | Typical Value (English) | | Typical Value (SI) | | Test Based On |
|---|---|---|---|---|---|
| Gloss (45°) | 90 | | 90 | | ASTM D2457 |
| Haze | 2.0 | % | 2.0 | % | 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 (0.8 mil / 20 micron) made from LL 1001.32 resin on a 3.5 inch cast film line with a 8.25 inch melt curtain, 80°F (27°C) chill roll temperature at a 150 ft/min (46 m/min) take-off speed and a melt temperature of 560°F (293°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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