

ExxonMobil™ LLDPE LL 1002 Series

Linear Low Density Polyethylene Resin

Product Description

LL 1002 series are butene LLDPE designed for the blown film process, offering high gloss and excellent draw down. Films made from LL1002 resins have very good tensile and toughness properties.

| General | | | | | |
|-------------------------------|--|-----------|--|---|----------------------|
| Additive | LL 1002KW: Antiblock: 3500 ppm; Slip: 1500 ppm; Processing Aid: No; Thermal Stabilizer: Yes LL 1002YB: Antiblock: No; Slip: No; Processing Aid: No; Thermal Stabilizer: Yes | | | | |
| Applications | Agricultural Film Bag in Box Blown Film Cast Film Food packaging Form Fill And Seal Packaging Freezer Film | | Garment Film General Packaging Industrial Packaging Institutional Can Liners Lamination Film Liners Mulch Film | Multilayer Packaging Film Packaging Films Personal Care Produce Bags On A Roll Shoppers Trash Can Liners | |
| Resin Properties | Typical Value | (English) | Typical Value | (SI) | Test Based On |
| Density | 0.918 | g/cm³ | 0.918 | g/cm³ | ExxonMobil Method |
| Melt Index (190°C/2.16 kg) | 2.0 | g/10 min | 2.0 | g/10 min | ASTM D1238 |
| Peak Melting Temperature | 250 | °F | 121 | °C | ExxonMobil Method |
| Film Properties | Typical Value | (English) | Typical Value | (SI) | Test Based On |
| Tensile Strength at Yield MD | 1400 | psi | 9.4 | MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1300 | psi | 8.9 | MPa | ASTM D882 |
| Tensile Strength at Break MD | 7100 | psi | 49 | MPa | ASTM D882 |
| Tensile Strength at Break TD | 4200 | psi | 29 | MPa | ASTM D882 |
| Elongation at Break MD | 590 | % | 590 | % | ASTM D882 |
| Elongation at Break TD | 800 | % | 800 | % | ASTM D882 |
| Secant Modulus TD - 1% Secant | 32000 | psi | 220 | MPa | ASTM D882 |
| Dart Drop Impact | 70 | g | 70 | g | ASTM D1709A |
| Elmendorf Tear Strength MD | 90 | g | 90 | g | ASTM D1922 |
| Elmendorf Tear Strength TD | 400 | 9 | 400 | g | ASTM D1922 |
| Optical Properties | Typical Value | (English) | Typical Value | (SI) | Test Based On |
| Gloss (45°) | 76 | | 76 | | ASTM D2457 |

4.4 %

4.4 %

ASTM D1003



Haze

