ExxonMobil Signature Polymers

# ExxonMobil™ C4LL 1018.XBU

*(Legacy name: ExxonMobil™ LLDPE LL1001xBU)*

## C4 Linear Low Density Polyethylene

### Product Description

ExxonMobil™ C4LL 1018.XBU resin offers excellent drawdown and puncture resistance combined with high gloss and clarity. It is frequently used as a blend partner with LDPE resins to improve film properties and processability. TnPP is not intentionally added to C4LL 1018.XBU Series resin.

### General

| | | | |
|---|---|---|---|
| Availability [1] | ▪ Asia Pacific | ▪ Latin America | |
| Additive | ▪ Antiblock: 3500 ppm<br>▪ Slip: 1500 ppm | ▪ Processing Aid: No<br>▪ Thermal Stabilizer: Yes | |
| Applications | ▪ Agricultural Film<br>▪ Bag in Box<br>▪ Barrier Food Packaging<br>▪ Blown Film<br>▪ Bread Bags<br>▪ Food Packaging<br>▪ Form Fill And Seal Packaging<br>▪ Freezer Film | ▪ Garment Film<br>▪ General Packaging<br>▪ Heavy Duty Bags<br>▪ Ice Bags<br>▪ Industrial Liners<br>▪ Industrial Packaging<br>▪ Lamination Film<br>▪ Liners | ▪ Multilayer Packaging Film<br>▪ Packaging Films<br>▪ Produce Bags<br>▪ Refuse Bags<br>▪ Shoppers<br>▪ Stand Up Pouches<br>▪ 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 | 252 | °F | 122 | °C | ExxonMobil Method |

| Thermal | Typical Value | (English) | Typical Value | (SI) | Test Based On |
|---|---|---|---|---|---|
| Vicat Softening Temperature | 208 | °F | 98.0 | °C | ExxonMobil Method |

| Film Properties | Typical Value | (English) | Typical Value | (SI) | Test Based On |
|---|---|---|---|---|---|
| Tensile Strength at Yield MD | 1300 | psi | 9.3 | MPa | ASTM D882 |
| Tensile Strength at Yield TD | 1400 | psi | 9.7 | MPa | ASTM D882 |
| Tensile Strength at Break MD | 6300 | psi | 44 | MPa | ASTM D882 |
| Tensile Strength at Break TD | 3800 | psi | 26 | MPa | ASTM D882 |
| Elongation at Break MD | 510 | % | 510 | % | ASTM D882 |
| Elongation at Break TD | 690 | % | 690 | % | ASTM D882 |
| Secant Modulus MD - 1% Secant | 25000 | psi | 170 | MPa | ASTM D882 |
| Secant Modulus TD - 1% Secant | 28000 | psi | 190 | MPa | ASTM D882 |
| Dart Drop Impact | 80 | g | 80 | g | ASTM D1709A |
| Elmendorf Tear Strength MD | 100 | g | 100 | g | ASTM D1922 |
| Elmendorf Tear Strength TD | 450 | g | 450 | g | ASTM D1922 |
| Puncture Force | 6 | lbf | 26 | N | ExxonMobil Method |
| Puncture Energy | 10 | in·lb | 1.1 | J | ExxonMobil Method |

| Optical Properties | Typical Value | (English) | Typical Value | (SI) | Test Based On |
|---|---|---|---|---|---|
| Gloss (45°) | 53 | | 53 | | ASTM D2457 |
| Haze | 13 | % | 13 | % | ASTM D1003 |

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## Legal Statement

Tris(nonylphenol)phosphite (TNPP) CAS# 26523-78-4 is not intentionally used by ExxonMobil in this product. Although this product is not routinely tested for its presence, based on product composition knowledge this substance is not expected to be present. However, the fact that this substance is not intentionally used by ExxonMobil in this product does not exclude that trace levels of this substance may be present as a result of the specific characteristics of the raw materials and/or of the manufacturing process.

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 (1.0 mil/25.4 micron) made from LL 1001xBU resin on a 2.5 inch (63.5 mm) blown film line with a 2.5:1 blow-up ratio, a melt temperature of 395-415°F (202-213°C), a 60 mil (1.52 mm) die gap at a rate of 10 lbs/hr/in die circumference (1.79 kg/hr/cm).

## 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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