

# ExxonMobil™ C6LL 2042.48 Blown

(Legacy name: ExxonMobil™ LLDPE LL 3402.48 Blown)

## C6 Linear Low Density Polyethylene

### Product Description

ExxonMobil™ C6LL 2042.48 is an ethylene 1-hexene medium density polyethylene blown film resin for applications requiring high stiffness. It can also be used in cast films. Films produced from this resin exhibit good tensile and puncture resistance properties.

### General

|                           |  |
|---------------------------|--|
| Availability <sup>1</sup> | <ul style="list-style-type: none"> <li>Latin America</li> <li>North America</li> </ul>   |
| Additive                  | <ul style="list-style-type: none"> <li>Antiblock: No</li> <li>Processing Aid: No</li> <li>Slip: No</li> <li>Thermal Stabilizer: Yes</li> </ul> |
| Applications              | <ul style="list-style-type: none"> <li>Agricultural Film</li> <li>Blown Film</li> <li>Diaper Backsheet</li> <li>Overwrap Film</li> </ul>       |
| Form(s)                   | <ul style="list-style-type: none"> <li>Pellets</li> </ul>  |
| Revision Date             | <ul style="list-style-type: none"> <li>06/11/2020</li> </ul>   |

### Resin Properties

|                            | Typical Value (English) | Typical Value (SI)      | Test Based On     |
|----------------------------|-------------------------|-------------------------|-------------------|
| Density                    | 0.942 g/cm <sup>3</sup> | 0.942 g/cm <sup>3</sup> | ASTM D1505        |
| Melt Index (190°C/2.16 kg) | 2.0 g/10 min            | 2.0 g/10 min            | ASTM D1238        |
| Peak Melting Temperature   | 264 °F                  | 129 °C                  | ExxonMobil Method |

### Thermal

|                             | Typical Value (English) | Typical Value (SI) | Test Based On     |
|-----------------------------|-------------------------|--------------------|-------------------|
| Vicat Softening Temperature | 248 °F                  | 120 °C             | ExxonMobil Method |

### Film Properties

|                               | Typical Value (English) | Typical Value (SI) | Test Based On     |
|-------------------------------|-------------------------|--------------------|-------------------|
| Tensile Strength at Yield MD  | 2800 psi                | 19 MPa             | ASTM D882         |
| Tensile Strength at Yield TD  | 3500 psi                | 24 MPa             | ASTM D882         |
| Tensile Strength at Break MD  | 6400 psi                | 44 MPa             | ASTM D882         |
| Tensile Strength at Break TD  | 5900 psi                | 41 MPa             | ASTM D882         |
| Elongation at Break MD        | 760 %                   | 760 %              | ASTM D882         |
| Elongation at Break TD        | 990 %                   | 990 %              | ASTM D882         |
| Secant Modulus MD - 1% Secant | 78000 psi               | 540 MPa            | ASTM D882         |
| Secant Modulus TD - 1% Secant | 100000 psi              | 710 MPa            | ASTM D882         |
| Dart Drop Impact              | < 60 g                  | < 60 g             | ASTM D1709A       |
| Elmendorf Tear Strength MD    | 20 g                    | 20 g               | ASTM D1922        |
| Elmendorf Tear Strength TD    | 110 g                   | 110 g              | ASTM D1922        |
| Puncture Force                | 5 lbf                   | 22 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°) | 29                      | 29                 | ASTM D2457    |
| Haze        | 22 %                    | 22 %               | 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 (1.0 mil/25.4 micron) made 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).

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#### Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> 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](http://www.exxonmobilchemical.com/ContactUs)

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