

**LLDPE****LLDPE 7042****LINEAR LOW DENSITY POLYETHYLENE (LLDPE)**

This is a butene-comonomer linear low-density polyethylene grade designed for the blown-film process. It offers high gloss and excellent draw-down in blown-film applications, and films made from this resin have very good tensile and toughness properties.

| Typical Application                                                                                                                                                                                                                                               | Product Characteristics                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Blown film</li> <li>• Cast film</li> <li>• Lamination film</li> <li>• Garment film</li> <li>• General packaging</li> <li>• Freezer film</li> <li>• Institutional can liners</li> <li>• Produce bags on a roll</li> </ul> | <ul style="list-style-type: none"> <li>• High gloss</li> <li>• Excellent draw-down in blown-film applications</li> <li>• Very good tensile and toughness properties</li> <li>• Thermally stabilised</li> </ul> |

| Film Properties                 |             |               |      |
|---------------------------------|-------------|---------------|------|
| Properties                      | Test Method | Typical Value | Unit |
| Dart Drop Impact                | ASTM D1709A | 66            | g    |
| Elmendorf Tear Strength (MD/TD) | ASTM D1922  | 85/400        | g    |
| Gloss (45°)                     | ASTM D2457  | 76            |      |
| Haze                            | ASTM D1003  | 4.4           | %    |

| Physical Properties                |             |               |                   |
|------------------------------------|-------------|---------------|-------------------|
| Properties                         | Test Method | Typical Value | Unit              |
| Melt Index (190°C/2.16 kg)         | ASTM D1238  | 2             | g/10 min          |
| Density                            | ASTM D792   | 0.918         | g/cm <sup>3</sup> |
| Peak Melting Temperature           |             | 121           | °C                |
| Tensile Stress at Yield (MD/TD)    | ASTM D882   | 11/10         | MPa               |
| Tensile Stress at Break (MD/TD)    | ASTM D882   | 49/29         | MPa               |
| Elongation at Break (MD/TD)        | ASTM D882   | 600/800       | %                 |
| Secant Modulus - 1% Secant (MD/TD) | ASTM D882   | 190/220       | MPa               |

1. The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.

2. Film properties measured on 25.4 µm (1.0 mil) thick blown film at a blow-up ratio of 2.5.

3. Density of 0.918 g/cm<sup>3</sup> reflects this generic butene-LLDPE recipe as produced across licensed plants; the wider published family range for this grade is 0.918-0.922 g/cm<sup>3</sup>, consistent with the nominal 0.920 g/cm<sup>3</sup> typically quoted.