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SUPERIOR FLEXIBLE PACKAGING RESINS

## Marlex® D163 Polyethylene

### METALLOCENE LINEAR LOW DENSITY POLYETHYLENE (mLLDPE)

**This metallocene linear low density polyethylene is an ethylene-hexene copolymer tailored for blown film applications that require:**

- Superb clarity
- Excellent gloss
- Exceptional toughness
- Outstanding heat seal

**Typical blown film applications include:**

- Seal layer in coextrusions
- Heavy duty packaging
- Clarity packaging

| Nominal Resin Properties   | English | SI                      | Method     |
|----------------------------|---------|-------------------------|------------|
| Melt Index, 190 °C/2.16 kg | ---     | 0.9 g/10 min            | ASTM D1238 |
| Density                    | ---     | 0.914 g/cm <sup>3</sup> | ASTM D1505 |
| Slip                       | None    | None                    | ---        |
| Antiblock                  | None    | None                    | ---        |
| Process Aid                | Yes     | Yes                     | ---        |

| Nominal Blown Film Properties @ 1 mil <sup>1</sup> | English         | SI            | Method     |
|----------------------------------------------------|-----------------|---------------|------------|
| Haze                                               | 4 %             | 4 %           | ASTM D1003 |
| Gloss, 60°                                         | 130             | 130           | ASTM D2457 |
| COF                                                | > 1             | > 1           | ASTM D1894 |
| Dart                                               | ---             | 800 g/mil     | ASTM D1709 |
| Elmendorf Tear MD/TD                               | ---             | 115/300 g/mil | ASTM D1922 |
| Tensile Strength at Yield MD/TD                    | 2000/1200 psi   | 14/8 MPa      | ASTM D882  |
| Tensile Strength at Break MD/TD                    | 12000/10000 psi | 83/69 MPa     | ASTM D882  |
| Tensile Elongation at Break MD/TD                  | 450/600 %       | 450/600 %     | ASTM D882  |
| 1 % Secant Modulus MD/TD                           | 19000/22000 psi | 131/152 MPa   | ASTM D882  |
| Seal Initiation Temperature <sup>2</sup>           | 208 °F          | 98.0 °C       | ASTM F88   |

1. Produced on a LLDPE line at 2.5:1 BUR, 80 mil die gap, 8 in die, 250 lb/h, 400 °F melt temperature.

2. Temperature at which 0.3 lb/in heat seal strength is achieved. 0.5 s dwell, 30 psi pressure, 11.8 in/min separation rate.

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