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SUPERIOR FLEXIBLE PACKAGING RESINS

### Marlex® D350-N Polyethylene

#### METALLOCENE MEDIUM DENSITY POLYETHYLENE (mMDPE)

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

- Exceptional clarity
- Excellent gloss
- High stiffness
- Good toughness

Typical blown film applications include:

- Overwrap
- Bakery film
- Stand-up pouches

| Nominal Resin Properties   | English | SI                      | Method     |
|----------------------------|---------|-------------------------|------------|
| Melt Index, 190 °C/2.16 kg | ---     | 0.9 g/10 min            | ASTM D1238 |
| Density                    | ---     | 0.933 g/cm <sup>3</sup> | ASTM D1505 |
| Slip                       | None    | None                    | ---        |
| Antiblock                  | None    | None                    | ---        |
| Process Aid                | None    | None                    | ---        |

| Nominal Blown Film Properties at 1 mil <sup>1</sup> | English         | SI           | Method     |
|-----------------------------------------------------|-----------------|--------------|------------|
| Haze                                                | 5 %             | 5 %          | ASTM D1003 |
| Gloss, 60°                                          | 130             | 130          | ASTM D2457 |
| COF                                                 | 0.9             | 0.9          | ASTM D1894 |
| Dart                                                | ---             | 80 g/mil     | ASTM D1709 |
| Elmendorf Tear MD/TD                                | ---             | 50/400 g/mil | ASTM D1922 |
| Tensile Strength at Yield MD/TD                     | 2400/3000 psi   | 17/21 MPa    | ASTM D882  |
| Tensile Strength at Break MD/TD                     | 8300/6600 psi   | 57/46 MPa    | ASTM D882  |
| Tensile Elongation at Break MD/TD                   | 580/700 %       | 580/700 %    | ASTM D882  |
| 1 % Secant Modulus MD/TD                            | 63000/88000 psi | 434/607 MPa  | ASTM D882  |
| Film Puncture Energy                                | 10.2 in·lbf     | 1.5 J        | ASTM D3763 |
| Film Puncture Force                                 | 7.13 lbf        | 32 N         | ASTM D3763 |
| Seal Initiation Temperature <sup>2</sup>            | 248 °F          | 120 °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.

