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SUPERIOR FLEXIBLE PACKAGING RESINS

Marlex® 7109DJ Polyethylene

LINEAR LOW DENSITY POLYETHYLENE (LLDPE)

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

- Good toughness properties
- Good drawdown
- Excellent processing characteristics
- Use alone or in coextrusions; blends with other polyolefins

Typical blown film applications include:

- Industrial films and bags
- Thin gauge applications
- General purpose packaging

| Nominal Resin Properties | English | SI | Method |
|----------------------------|----------|-------------------------|------------|
| Melt Index, 190 °C/2.16 kg | --- | 0.9 g/10 min | ASTM D1238 |
| Density | --- | 0.918 g/cm ³ | ASTM D1505 |
| Slip | None | None | --- |
| Antiblock | 2500 ppm | 2500 ppm | --- |
| Process Aid | Yes | Yes | --- |

| Nominal Blown Film Properties at 1 mil ¹ | English | SI | Method |
|---|-----------|-----------|------------|
| Haze | 18 % | 18 % | ASTM D1003 |
| Gloss, 60° | 60 | 60 | ASTM D2457 |
| COF | 0.6 | 0.6 | ASTM D1894 |
| Dart | --- | 300 g/mil | ASTM D1709 |
| Elmendorf Tear MD | --- | 450 g/mil | ASTM D1922 |
| Elmendorf Tear TD | --- | 750 g/mil | ASTM D1922 |
| Tensile Strength at Break MD | 8000 psi | 55 MPa | ASTM D882 |
| Tensile Strength at Break TD | 5000 psi | 34 MPa | ASTM D882 |
| Tensile Elongation at Break MD | 450 % | 450 % | ASTM D882 |
| Tensile Elongation at Break TD | 650 % | 650 % | ASTM D882 |
| 1 % Secant Modulus MD | 32000 psi | 221 MPa | ASTM D882 |
| 1 % Secant Modulus TD | 38000 psi | 262 MPa | ASTM D882 |

1. Produced on 3.5 in extruder, 30:1 L/D, 8 in die, 80 mil die gap, 2.5:1 BUR, 440 °F melt temperature

Revision Date: August, 2021



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