

Chevron Phillips Marlex® 7109DJ

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

- Good toughness properties

| Physical Properties | Metric | English | Comments |
|---------------------|---------------|---------------------------|-----------------------------|
| Density | 0.918 g/cc | 0.0332 lb/in ³ | ASTM D1505 |
| Thickness | 31.8 microns | 1.25 mil | |
| Melt Flow | 0.90 g/10 min | 0.90 g/10 min | 190 °C/2.16 kg; ASTM D1238E |

| Mechanical Properties | Metric | English | Comments |
|------------------------------------|---------------|-----------|---------------------|
| Film Elongation at Break, MD | 450 % | 450 % | ASTM D882 |
| Film Elongation at Break, TD | 650 % | 650 % | ASTM D882 |
| Coefficient of Friction | 0.60 | 0.60 | ASTM D1894 |
| Elmendorf Tear Strength, MD | 17.7 g/micron | 450 g/mil | Notched; ASTM D1922 |
| Elmendorf Tear Strength, TD | 29.5 g/micron | 750 g/mil | Notched; ASTM D1992 |
| Dart Drop | 11.8 g/micron | 300 g/mil | ASTM D1709 |
| Film Tensile Strength at Break, MD | 55.2 MPa | 8000 psi | ASTM D882 |
| Film Tensile Strength at Break, TD | 34.5 MPa | 5000 psi | ASTM D882 |
| 1% Secant Modulus, MD | 221 MPa | 32000 psi | ASTM D882 |
| 1% Secant Modulus, TD | 262 MPa | 38000 psi | ASTM D882 |

| Optical Properties | Metric | English | Comments |
|--------------------|--------|---------|-----------------|
| Haze | 18 % | 18 % | ASTM D1003 |
| Gloss | 60 % | 60 % | 60°; ASTM D2457 |

| Processing Properties | Metric | English | Comments |
|------------------------|-----------|-----------|----------|
| Processing Temperature | 204 °C | 399 °F | |
| Die Opening | 0.0762 cm | 0.0300 in | |
| Extruder Size | 6.35 cm | 2.50 in | |

| Descriptive Properties | | | |
|------------------------|---------|--|--|
| Color | Natural | | |