

Chevron Phillips Marlex® 7109M

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/in³	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
Antiblock Level	6500 ppm	6500 ppm	
Slip Level	1600 ppm	1600 ppm	

Mechanical Properties	Metric	English	Comments
Film Elongation at Break, MD	400 %	400 %	ASTM D882
Film Elongation at Break, TD	6500 %	6500 %	ASTM D882
Coefficient of Friction	0.10	0.10	ASTM D1894
Elmendorf Tear Strength, MD	15.7 g/micron	400 g/mil	Notched; ASTM D1922
Elmendorf Tear Strength, TD	27.6 g/micron	700 g/mil	Notched; ASTM D1992
Dart Drop	9.84 g/micron	250 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	24 %	24 %	ASTM D1003
Gloss	50 %	50 %	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	