

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

