

Marlex® 7120X Polyethylene

LINEAR LOW DENSITY POLYETHYLENE (LLDPE)

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

- Excellent processing characteristics
- Exceptional drawdown
- Use alone or in coextrusions; blends with other polyolefins

Typical blown film applications include:

- Coextrusions
- Blend component to improve drawdown
- Thin gauge applications
- General purpose packaging

Nominal Resin Properties	English	SI	Method
Melt Index, 190 °C/2.16 kg	---	2 g/10 min	ASTM D1238
Density	---	0.919 g/cm ³	ASTM D1505
Slip	None	None	---
Antiblock	None	None	---
Process Aid	None	None	---

Nominal Blown Film Properties at 1 mil ¹	English	SI	Method
Haze	18 %	18 %	ASTM D1003
Gloss, 60°	65	65	ASTM D2457
COF	0.8	0.8	ASTM D1894
Dart	---	175 g/mil	ASTM D1709
Elmendorf Tear MD	---	300 g/mil	ASTM D1922
Elmendorf Tear TD	---	750 g/mil	ASTM D1922
Tensile Strength at Break MD	6500 psi	45 MPa	ASTM D882
Tensile Strength at Break TD	5500 psi	38 MPa	ASTM D882
Tensile Elongation at Break MD	500 %	500 %	ASTM D882
Tensile Elongation at Break TD	750 %	750 %	ASTM D882
1 % Secant Modulus MD	33000 psi	228 MPa	ASTM D882
1 % Secant Modulus TD	40000 psi	276 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



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LINEAR LOW DENSITY POLYETHYLENE (LLDPE)

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

- Good stiffness at thin gauges
- Good drawdown
- Excellent processability
- Can use straight or in blends with LDPE or HDPE
- Available with slip or high stabilization package

Typical cast film applications include:

- Stretch wrap
- Overwrap
- Coextrusions

Nominal Resin Properties	English	SI	Method
Melt Index, 190 °C/2.16 kg	---	2 g/10 min	ASTM D1238
Density	---	0.919 g/cm ³	ASTM D1505
Slip	None	None	---
Antiblock	None	None	---
Process Aid	None	None	---

Nominal Cast Film Properties at 1.25 mil ¹	English	SI	Method
Haze	3 %	3 %	ASTM D1003
Gloss, 60°	140	140	ASTM D2457
Dart	---	140 g/mil	ASTM D1709
Elmendorf Tear MD	---	300 g/mil	ASTM D1922
Elmendorf Tear TD	---	550 g/mil	ASTM D1922
Tensile Strength at Break MD	6200 psi	43 MPa	ASTM D882
Tensile Strength at Break TD	4800 psi	33 MPa	ASTM D882
Tensile Elongation at Break MD	580 %	580 %	ASTM D882
Tensile Elongation at Break TD	780 %	780 %	ASTM D882
1 % Secant Modulus MD	29000 psi	200 MPa	ASTM D882
1 % Secant Modulus TD	31000 psi	214 MPa	ASTM D882

1. Produced on 2.5 in extruder, 24:1 L/D, 25 mil. die gap, 520 °F melt temperature

