For more information and technical assistance contact:

Chevron Phillips Chemical
P.O. Box 4910
The Woodlands, TX 77387-4910
800.231.1212

Marlex Polyethylene

SUPERIOR FLEXIBLE PACKAGING RESINS

Marlex® D173 Polyethylene

METALLOCENE LINEAR LOW DENSITY POLYETHYLENE (mLLDPE)

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

- Superior clarity
- Excellent gloss
- Exceptional toughness
- Outstanding heat seal

Typical cast film applications include:

- Stretch wrap
- Overwrap
- Coextrusions

Nominal Resin Properties	English	SI	Method
Melt Index, 190 °C/2.16 kg	---	3.5 g/10 min	ASTM D1238
Density	---	0.918 g/cm^3	ASTM D1505
Slip	None	None	---
Antiblock	None	None	---
Process Aid	None	None	---

Nominal Cast Film Properties at 1 mil[1]	English	SI	Method
Haze	2 %	2 %	ASTM D1003
Gloss, 60°	140	140	ASTM D2457
COF	> 1	> 1	ASTM D1894
Dart	---	450 g/mil	ASTM D1709
Elmendorf Tear MD	---	300 g/mil	ASTM D1922
Elmendorf Tear TD	---	500 g/mil	ASTM D1922
Tensile Strength at Yield MD	1500 psi	10 MPa	ASTM D882
Tensile Strength at Yield TD	1300 psi	9 MPa	ASTM D882
Tensile Strength at Break MD	7800 psi	54 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	580 %	580 %	ASTM D882
1 % Secant Modulus MD	15000 psi	103 MPa	ASTM D882
1 % Secant Modulus TD	16000 psi	110 MPa	ASTM D882
Seal Initiation Temperature[2]	214 °F	101 °C	ASTM F88

1. Produced on a cast film line at 200 lb/h, 25 mil die gap, 550 °F melt temperature
2. Temperature at which 0.3 lb/in heat seal strength is achieved. 0.5 s dwell, 30 psi pressure, 11.8 in/min separation rate.

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