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Marlex® Polyethylene

SUPERIOR FLEXIBLE PACKAGING RESINS

Marlex® D139FK Polyethylene

METALLOCENE LINEAR LOW DENSITY POLYETHYLENE (mLLDPE)

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

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

Typical blown film applications include:

- Seal layer in coextrusions
- Heavy duty packaging
- Clarity packaging

Nominal Resin Properties	English	SI	Method
Melt Index, 190 °C/2.16 kg	---	1.0 g/10 min	ASTM D1238
Density	---	0.918 g/cm^3	ASTM D1505
Slip	1000 ppm	1000 ppm	---
Antiblock	5000 ppm	5000 ppm	---
Process Aid	Yes	Yes	---

Nominal Blown Film Properties @ 1 mil[1]	English	SI	Method
Haze	9 %	9 %	ASTM D1003
Gloss, 60°	103	103	ASTM D2457
COF	0.15	0.15	ASTM D1894
Dart	---	540 g/mil	ASTM D1709
Elmendorf Tear MD	---	165 g/mil	ASTM D1922
Elmendorf Tear TD	---	440 g/mil	ASTM D1922
Tensile Strength at Yield MD	1850 psi	14 MPa	ASTM D882
Tensile Strength at Yield TD	1400 psi	10 MPa	ASTM D882
Tensile Strength at Break MD	8300 psi	59 MPa	ASTM D882
Tensile Strength at Break TD	6650 psi	49 MPa	ASTM D882
Tensile Elongation at Break MD	450 %	450 %	ASTM D882
Tensile Elongation at Break TD	560 %	560 %	ASTM D882
1 % Secant Modulus MD	24000 psi	165 MPa	ASTM D882
1 % Secant Modulus TD	27300 psi	188 MPa	ASTM D882
Seal Initiation Temperature[2]	219 °F	104 °C	ASTM F88

1. Produced on a LLDPE line at 2.5:1 BUR, 80 mil die gap, 8 in die, 250 lb/h, 400 °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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