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® D350-P01 Polyethylene

METALLOCENE MEDIUM DENSITY POLYETHYLENE (mMDPE)

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

- Exceptional clarity
- Excellent gloss
- High stiffness
- Good toughness
- Non-PFAS process aid[3]

Typical blown film applications include:

- Overwrap
- Bakery film
- Stand-up pouches

Nominal Resin Properties	English	SI	Method
Melt Index, 190 °C/2.16 kg	---	0.9 g/10 min	ASTM D1238
Density	---	0.933 g/cm^3	ASTM D1505
Slip	None	None	---
Antiblock	None	None	---
Process Aid	Yes	Yes	---

Nominal Blown Film Properties at 1 mil[1]	English	SI	Method
Haze	5 %	5 %	ASTM D1003
Gloss, 60°	130	130	ASTM D2457
COF	0.9	0.9	ASTM D1894
Dart	---	80 g/mil	ASTM D1709
Elmendorf Tear MD/TD	---	50/400 g/mil	ASTM D1922
Tensile Strength at Yield MD/TD	2400/3000 psi	17/21 MPa	ASTM D882
Tensile Strength at Break MD/TD	8300/6600 psi	57/46 MPa	ASTM D882
Tensile Elongation at Break MD/TD	580/700 %	580/700 %	ASTM D882
1 % Secant Modulus MD/TD	63000/88000 psi	434/607 MPa	ASTM D882
Film Puncture Energy	10.2 in·lbf	1.5 J	ASTM D3763
Film Puncture Force	7.13 lbf	32 N	ASTM D3763
Seal Initiation Temperature[2]	248 °F	120 °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.
3. PFAS as defined by OECD (2021), Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances: Recommendations and Practical Guidance, OECD Series on Risk Management, No. 61, OECD Publishing, Paris. A non-PFAS process aid is not structurally identified as PFAS by OECD (2021).

Revision Date: February, 2025

Chevron Phillips CHEMICAL

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chevron Phillips Chemical Company LP does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.