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® HHM TR-144 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high molecular weight, ethylene-hexene copolymer is tailored for blown film applications that require:

- Toughness and durability
- Good processability and melt strength
- Good blending with HMW-HDPE

Typical Applications for HHM TR-144 include:

- T-shirt bags
- Multi-wall liners
- Trash bags

This resin meets or exceeds these standards/specifications:

- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 of 21 CFR 176.170(c)
- EU No. 10/2011

For a safety data sheet (SDS) visit our site at www.cpchem.com

Nominal Resin Properties [1,2]	English	SI	Method
Density	0.946 g/cm3	0.946 g/cm^3	ASTM D1505
Flow Rate (MI, 190 °C/2.16 kg)	0.18 g/10 min	0.18 g/10 min	ASTM D1238
Flow Rate (HLMI, 190 °C/21.6 kg)	15 g/10 min	15 g/10 min	ASTM D1238
Peak Melting Temperature	264°C	129°C	ASTM D3418
Vicat Softening Temperature, Loading 1, Rate A	255 °F	124°C	ASTM D1525
Flexural Modulus, Tangent, 16:1 span:depth, 0.5 in/min / 12.7 mm/min	164,000 psi	1,130 MPa	ASTM D790
ESCR, Condition B (100 % Igepal), F_{50}	> 1,000 h	> 1,000 h	ASTM D1693
Brittleness Temperature, Type A clamp, Type I specimen	< -103 °F	< -75 °C	ASTM D746
Nominal Blown Film Properties at 1 mil / 0.025 mm [1,3]	**English**	**SI**	**Method**
Dart Drop (26 in / 66 cm)	90 g	90 g	ASTM D1709
Elmendorf Tear MD	19 g	19 g	ASTM D1922
Elmendorf Tear TD	270 g	270 g	ASTM D1922
Tensile Strength at Yield MD, 2 in/min / 50.8 mm/min	3480 psi	24 MPa	ASTM D882
Tensle Strength at Yield TD, 2 in/min / 50.8 mm/min	3770 psi	26 MPa	ASTM D882
Tensile Elongation at Break MD, 2 in/min / 50.8 mm/min	480 %	480 %	ASTM D882
Tensile Elongation at Break TD, 2 in/min / 50.8 mm/min	640 %	640 %	ASTM D882

1. The nominal properties reported herein are typical of the product, but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded.
2. The physical properties were determined on compression molded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.
3. Based on 1 mil / 0.025 mm film produced at 4:1 blow-up ratio

Revision Date: April 2026

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.

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Marlex® Polyethylene

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® HHM TR-144 Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high molecular weight, ethylene-hexene copolymer is tailored for extrusion and rigid packaging applications that require:

- Toughness and durability
- Good processability and melt strength
- Good blending with HDPE
- Excellent slow crack growth resistance

Rigid Applications for HHM TR-144 include:

- Pipe and tubing
- Blow molded tanks
- Sheet

This resin meets or exceeds these standards/specifications:

- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 of 21 CFR 176.170(c)
- EU No. 10/2011

For a safety data sheet (SDS) visit our site at www.cpchem.com

Nominal Resin Properties(1)	English	SI	Method
Density	0.946 g/cm^3	0.946 g/cm^3	ASTM D1505
Flow Rate (MI, 190 °C/2.16 kg)	0.18 g/10 min	0.18 g/10 min	ASTM D1238
Flow Rate (HLMI, 190 °C/21.6 kg)	15 g/10 min	15 g/10 min	ASTM D1238
Peak Melting Temperature	264 °F	129°C	ASTM D3418
Vicat Softening Temperature, Loading 1, Rate A	255 °F	124°C	ASTM D1525
Durometer Hardness, Type D (Shore D)	63	63	ASTM D2240
Flexural Modulus, Tangent, 16:1 span:depth, 0.5 in/min / 12.7 mm/min	164,000 psi	1,130 MPa	ASTM D790
Flexural Modulus, 2% Secant, 16:1 span: depth, 0.5 in/min / 12.7 mm/min	125,000 psi	860 MPa	ASTM D790
Tensile Strength at Yield, 2 in/min, Type IV bar	3,500 psi	24 MPa	ASTM D638
Tensile Elongation at Break, 2 in/min, Type IV bar	800 %	800 %	ASTM D638
Tensile Impact, Type S Bar	142 ft*lbf/in^2	298 kJ/m^2	ASTM D1822
Heat Deflection Temperature, 66 psi, Edge	154 °F	68 °C	ASTM D648
Thermal Stability	> 438 °F	> 220 °C	ASTM D3350
ESCR, Condition B (100 % Igepal), F_{50}	> 1,000 h	> 1,000 h	ASTM D1693
Brittleness Temperature, Type A clamp, Type I specimen	< -103 °F	< -75 °C	ASTM D746

1. The nominal properties reported herein are typical of the product, but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded. The physical properties were determined on compression molded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.

Revision Date: April 2026

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