

For more information and technical assistance contact:

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



PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex HMN[®] TR-935 / HMN TR-935G

MEDIUM DENSITY POLYETHYLENE

These hexene copolymers are tailored for rotational molding applications that require:

- Wide process windows
- Excellent impact strength
- Good flow
- Excellent ESCR

Typical applications for HMN TR-935 and HMN TR-935G include items such as:

- Recreational and agricultural equipment
- Toys and carts

These resins are available in:

- Pellet form - HMN TR-935
- 35 US mesh powder - HMN TR-935G

These resins meet these specifications:

- ASTM D4976 - PE 223
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per 21 CFR 176.170(c) Table 2. Single use articles contacting food types I, II, IV-B, VI-A, VI-B, VII-B, and VIII. Repeated use articles contacting all food types defined in 21 CFR 176.170(c) Table 1.
- NSF / ANSI Standard 61 for potable water (CLD 23)
- NSF / ANSI Standard 51 for any food contact (MTU 100°C)
- UL94HB yellow card per UL file E54700
- UL746C (f1) yellow card per UL file E54700
- FMVSS.302 burn test
- AS/NZS 4020:2005 (contact with drinking water)
- Long term UV stabilization – ASTM 2565 (Cycle 1): Greater than **UV-16**

NOMINAL PHYSICAL PROPERTIES ^{(1) (2)}	English	SI	Method
Density	---	0.936 g/cm ³	ASTM D1505
Melt Index , 190/2.16	---	6.0 g/10 min	ASTM D1238
ESCR , Condition A (100% Igepal), F ₅₀	>1,000 h	>1,000 h	ASTM D1693
ESCR , Condition A (10% Igepal), F ₅₀	130 h	130 h	ASTM D1693
Durometer Hardness , Type D (Shore D)	59	59	ASTM D2240
Vicat Softening Temperature , Loading 1, Rate A	231°F	110°C	ASTM D1525
Brittleness Temperature , Type A, Type I specimen	-103°F	-75°C	ASTM D746
Melting Temperature	263°F	128°C	ASTM D3418
Crystallization Temperature	234°F	112°C	ASTM D3418
ROTATIONAL MOLDED PROPERTIES ^{(1) (3)}	English	SI	Method
Impact Strength , 1/8" (3.2 mm) thickness, -40 C°	75 ft-lb	102 J	ARM Impact
Impact Strength , 1/4" (6.35 mm) thickness, -40 C°	175 ft-lb	237 J	ARM Impact
Tensile Strength at Yield , 2 in/min, Type IV bar	2,400 psi	16.5 MPa	ASTM D638
Elongation at Break , 2 in/min, Type IV bar	750%	750%	ASTM D638
Flexural Modulus , Tangent - 16:1 span:depth, 0.5 in/min	110,000 psi	760 MPa	ASTM D790
Flexural Modulus , 1% Secant - 16:1 span:depth, 0.5 in/min	90,000 psi	620 MPa	ASTM D790
Heat Deflection Temperature , 66 psi, Method A	136°F	58°C	ASTM D648
Heat Deflection Temperature , 264 psi, Method A	106°F	41°C	ASTM D648

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. Properties were measured on rotational molded samples with 1/8" (3.17 mm) average thickness, unless otherwise noted. The average peak internal air temperature during molding was above 400°F.

Revision Date July, 2011

Another quality product from



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.