

# Marlex® HXM 50100P

High Density Polyethylene

**This extra high molecular weight, hexene copolymer is tailored for large blow moulded and thermoformed parts that:**

- Require good melt strength
- Require good rigidity
- Require excellent ESCR
- Require excellent low temperature impact strength
- Are durable and recyclable for sustainability

**Typical blow moulded applications for HXM 50100P include:**

- 55-gallon shipping containers
- Fuel containers
- Agricultural chemical tanks

**Typical thermoformed applications for HXM 50100P include:**

- Pallets
- Automotive dunnage
- Truck bedliners
- Playground equipment

**This resin meets these specifications:**

- ASTM D4976 – PE 235
- FDA 21 CFR 177.1520(c) 3.2a. May be used in contact with all types of foods at conditions of use B through H per 21 CFR 176.170(c).
- All constituents of this resin are listed in Commission Regulation (EU) No 10/2011. Meets the requirements of Commission Regulation (EU) No 10/2011, Framework Regulation (EC) No. 1935/2004, and Commission Regulation (EC) No 2023/2006.

**For a Material Safety Data Sheet (MSDS), visit our site at [www.saudipolymers.com](http://www.saudipolymers.com)**

Nominal Resin Properties <sup>(1,2)</sup>	Value (SI Units)	Method
<b>Density</b>	0.948 g/cm <sup>3</sup>	ASTM D1505
<b>Flow Rate</b> (HLMI, 190/21.6)	9 g/10 min	ASTM D1238
<b>Tensile Strength at Yield</b> , 2 in/min, Type IV bar	25 MPa	ASTM D638
<b>Elongation at Break</b> , 2 in/min, Type IV bar	700 %	ASTM D638
<b>Flexural Modulus</b> , Tangent, 16:1 span:depth, 0.5 in/min	1,200 MPa	ASTM D790
<b>ESCR</b> , Condition B (100% Igepal), F <sub>50</sub>	>600 h	ASTM D1693
<b>Durometer Hardness</b> , Type D (Shore D)	68	ASTM D2240
<b>Vicat Softening Temperature, Loading 1, Rate A</b>	126 °C	ASTM D1525
<b>Heat Deflection Temperature</b> , 66 psi, Method A	78 °C	ASTM D648
<b>Brittleness Temperature</b> , Type A, Type I specimen	<-75 °C	ASTM D746
<b>Tensile Impact</b> , Type S bar	190 kJ/m <sup>2</sup>	ASTM D1822

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 moulded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.

Revision Date July 2014



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. Saudi Polymers Company 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 any international laws which may be encountered in the use thereof. Such questions should be investigated by the user.

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