



Marlex[®] HXM 50100S

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

- Require good rigidity
- Require good melt strength
- Require excellent ESCR
- Require excellent low temperature impact strength

Typical blow molded applications for HXM 50100S include:

- Jerrycans
- Open top drums
- Shipping containers
- Fuel containers
- Agricultural chemical tanks

Typical thermoformed applications for HXM 50100S include:

- Pallets
- Automotive dunnage
- Truck bedliners
- Playground equipment

This resin meets these specifications:

- FDA 21 CFR 177.1520(c) 3.2a. May be used in contact with all types of food at conditions of use B through H per Table 2 of 21 CFR 176.170(c)
- ASTM D4976 – PE 235
- Listed in Drug Master File #1016
- All constituents of this resin are listed in the Commission Regulation (EU) No. 10/2011

NOMINAL PHYSICAL PROPERTIES ⁽¹⁾	TEST METHOD	UNIT	VALUE
Density	ASTM D1505	g/cm ³	0.948
Melt Index, Condition 190/2.16	ASTM D1238	g/10 min	0.06
Condition 190/21.6			9.0
Tensile Strength at Yield, 50 mm/min, Type IV bar	ASTM D638	MPa	25
Elongation at Break, 50 mm/min, Type IV bar	ASTM D638	%	700
Flexural Modulus, Tangent - 16:1 span:depth, 12.7 mm/min	ASTM D790	MPa	1200
ESCR, Condition B (100% Igepal), F ₅₀	ASTM D1693	h	>1000
Durometer Hardness, Type D (Shore D)	ASTM D2240	-	68
Vicat Softening Temperature, Loading 1, Rate A	ASTM D1525	°C	126
Heat Deflection Temperature, 66 psi, Method A	ASTM D648	°C	78
Brittleness Temperature, Type A clamp, Type I specimen	ASTM D746	°C	<-75
Tensile Impact, Type S bar	ASTM D1822	kJ/m ²	190

(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.

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 Singapore Chemicals (Private) Limited 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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