

Forum Chemical Technical Specification Sheet

Marlex® HXM 50100

NOMINAL PHYSICAL PROPERTIES	English	SI	Method
Density	---	0.948 g/cm ³	ASTM D1505
Flow Rate (HLMI, 190/21.6)	---	10.0 g/10 min	ASTM D1238
Tensile Strength at Yield, 2 in/min, Type IV bar	3,600 psi	25 MPa	ASTM D638
Elongation at Break, 2 in/min, Type IV bar	700%	700%	ASTM D638
Flexural Modulus, Tangent - 16:1 span:depth, 0.5 in/min	175,000 psi	1,200 MPa	ASTM D790
ESCR, Condition B (100% Igepal), F ₅₀	>600 h	>600 h	ASTM D1693
Durometer Hardness, Type D (Shore D)	68	68	ASTM D2240
Vicat Softening Temperature, Loading 1, Rate A	258°F	126°C	ASTM D1525
Heat Deflection Temperature, 66 psi, Method A	173°F	78°C	ASTM D648
Brittleness Temperature, Type A, Type I specimen	<-103°F	<-75°C	ASTM D746
Tensile Impact, Type S bar	90 ft•lb/in ²	190 kJ/m ²	ASTM D1822

This extra high molecular weight, hexene copolymer is tailored for large blow molded 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 molded applications for HXM 50100 include:

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

Typical thermoformed applications for HXM 50100 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, use conditions B through H
- UL94HB yellow card per UL file E54700
- NSF Standard 61 for potable water