

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

# Marlex<sup>®</sup> HHM 5502 BN

HIGH DENSITY ETHYLENE HEXENE COPOLYMER

### **Customer Benefit**

This resin allows the blow molder to reduce inventory of resin types because it can be used to package bleach and most detergents. Compare this with other blow molding or thermoforming resins of the same stiffness.

- Excellent stiffness
- Exceptional stress cracking resistance

## **Specification Data**

- Meets these requirements
- ASTM D4976 PE 235
- FDA Regulation 177.1520. Suitable for food packaging. Listed in Drug Master File

### **Processing Recommendations**

Maintain these conditions for optimum part quality

- Blow Molding Stock Temperature: 340 400° F (194 216°C)
- Extrusion Melt Temperature: 380 450° F (194 216° C)
- Thermoforming Surface Temperature: 340 360° F (171 - 182° C)

## **Suggested Applications**

- Bottles for
- Bleach and detergents
- Industrial chemicals
- Industrial parts
- Pharmaceuticals

NOMINAL PHYSICAL PROPERTIES <sup>(1)</sup>	English	SI	Method
Melt Index, 190/2.16	0.35 g/10 min	0.35 g/10 min	ASTM D1238
Tensile Strength at Yield, 2 in/min, Type IV Bar	4000 psi	28 MPa	ASTM D638
Ultimate Elongation, 2 in (50 mm)per min	>600%	>600%	D638 Type IV
ESCR, Condition A (100% Igepal), F <sub>50</sub>	45 h	45 h	ASTM D1693
ESCR, Condition B (100% Igepal), F <sub>50</sub>	35 h	35 h	ASTM D1693
Brittleness Temperature, Type A, Type I specimen	<-94 °F	<-70°C	ASTM D746
Flexural Modulus	200,000 Psi	1378 Mpa	D790
Bottles ESCR, 140° F (60° C), F <sub>50</sub> <sup>(2)</sup>	250 h	250 h	
Sheet Sag <sup>(3)</sup>	7-9 in	18-23 cm	

(1) Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D1928

(2) Test Conditions: 10 ounce, 23 gram bottle, 10% fill, Joy Dishwashing Liquid

(3) 2 ft X 4 ft X 125 mil (0.61m X 1.22m X 3.2 mm) thick blank heated to forming temperature

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.

MSDS #E100

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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 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.