

# 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.