

# Marlex® HHM 5502LD Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high molecular weight, ethylene-hexene copolymer with antistatic agent is tailored for lightweight blow molded containers that require:

- Excellent stiffness
- Exceptional processability
- Durability

Typical blow molded applications for HHM 5502LD include:

- Detergent bottles
- Household and industrial chemical containers

This resin meets these specifications:

- ASTM D4976 - PE 235
- FDA 21 CFR 177.1520(c) 3.1a, for use in molded containers, foods with pH > 5 of types I, IV-B, VI-B, VII-B and VIII per Table 1 of 21 CFR 176.170(c) and conditions of use E through G per Table 2 of 21 CFR 176.170(c)
- Listed in the Drug Master File

NOMINAL PHYSICAL PROPERTIES <sup>(1)</sup>	English	SI	Method
<b>Density</b>	---	0.955 g/cm <sup>3</sup>	ASTM D1505
<b>Flow Rate</b> (MI, 190 °C/2.16 kg)	---	0.35 g/10 min	ASTM D1238
<b>Tensile Strength at Yield</b> , 2 in/min, Type IV bar	4,000 psi	27 MPa	ASTM D638
<b>Elongation at Break</b> , 2 in/min, Type IV bar	600 %	600 %	ASTM D638
<b>Flexural Modulus</b> , Tangent - 16:1 span:depth, 0.5 in/min	200,000 psi	1,370 MPa	ASTM D790
<b>ESCR</b> , Condition B (100 % Igepal), F50	24 h	24 h	ASTM D1693
<b>Brittleness Temperature</b> , Type A, Type I specimen	< -103 °F	< -75 °C	ASTM D746

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.

