

Marlex® HHM 5502-01ST Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This high molecular weight, ethylene-hexene copolymer is tailored for extruded, thermoformed, and blow molded applications that require:

- Excellent stiffness
- Good processability
- Durability

Typical sheet extrusion and thermoforming applications include:

- Signage
- Tote boxes
- Food containers
- Fragility packaging

Typical blow molding applications include:

- Tote boxes
- Wastebaskets
- Storage sheds and cabinets
- Ice chests and coolers

This resin meets these specifications:

- ASTM D4976 - PE 235
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 of 21 CFR 176.170(c)
- UL94HB yellow card per UL file E349283
- Listed in the Drug Master File

NOMINAL PHYSICAL PROPERTIES ⁽¹⁾	English	SI	Method
Density	---	0.955 g/cm ³	ASTM D1505
Flow Rate (MI, 190 °C/2.16 kg)	---	0.25 g/10 min	ASTM D1238
Tensile Strength at Yield , 2 in/min, Type IV bar	4,000 psi	27 MPa	ASTM D638
Elongation at Break , 2 in/min, Type IV bar	600 %	600 %	ASTM D638
Flexural Modulus , Tangent - 16:1 span:depth, 0.5 in/min	200,000 psi	1,370 MPa	ASTM D790
ESCR , Condition B (100 % Igepal), F50	24 h	24 h	ASTM D1693
Brittleness Temperature , 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.

