

# Marlex® 5104 Polyethylene

LOW DENSITY POLYETHYLENE (LDPE)

This autoclave, low density, ethylene homopolymer is tailored for blow molded applications that require:

- Good impact resistance
- Excellent flexibility
- Good clarity
- Good gloss
- No slip or antiblock

Typical blow molded applications for 5104 include:

- Pharmaceutical bottles
- Squeeze bottles
- Flexible toys

Typical extrusion applications for 5104 include:

- Wood-plastic composite component
- Blends to improve friction values
- Blends to enhance part flexibility
- Adhesives

This resin meets these specifications:

- ASTM D4976 - PE 113
- FDA 21 CFR 177.1520(c) 2.2, use conditions B through H 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>	---	0.924 g/cm <sup>3</sup>	ASTM D1505
<b>Flow Rate</b> (MI, 190 °C/2.16 kg)	---	1.3 g/10 min	ASTM D1238
<b>Tensile Strength at Yield</b> , 2 in/min, Type IV bar	2,400 psi	16 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	50,000 psi	340 MPa	ASTM D790
<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.

