

PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® 1007 Polyethylene

LOW DENSITY POLYETHYLENE (LDPE)

This autoclave LDPE homopolymer is tailored for applications that require:

- · Excellent flexibility
- Good flow
- Good warpage resistance
- Durability

Typical injection molded applications for 1007 include:

- Housewares
- Tamper evident, snap-on caps
- Wine bottle sleeve caps

This resin meets these specifications:

- ASTM D4976 PE 113
- FDA 21 CFR 177.1520(c) 2.2, use conditions B through H per 21 CFR 176.170(c)

| Nominal Physical Properties ⁽¹⁾ | English | SI | Method |
|---|------------|-------------------------|------------|
| Density | | 0.917 g/cm ³ | ASTM D1505 |
| Flow Rate (MI, 190 °C/2.16 kg) | | 7.0 g/10 min | ASTM D1238 |
| Tensile Strength at Yield, 2 in/min, Type IV bar | 1,300 psi | 9 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 | 30,000 psi | 200 MPa | ASTM D790 |
| Durometer Hardness, Type D (Shore D) | 47 | 47 | ASTM D2240 |
| Vicat Softening Temperature, Loading 1, Rate A | 189 °F | 87 °C | ASTM D1525 |
| Brittleness Temperature, Type A, Type I specimen | -87 °F | -66 °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.





