



## Product Data Sheet

### **Eastman Polyethylene 1870A**

#### **Application/Uses**

- Flexible medical
- Lids
- Medical

#### **Product Description**

Eastman polyethylene 1870A is used for injection molding applications. It has the best stress crack resistance for lids.

#### **Typical Properties**

<b>Property<sup>a</sup></b>	<b>Test<sup>b</sup> Method</b>	<b>Typical Value, Units<sup>c</sup></b>
Melt Index (Condition 190°C/2.16 kg)	D 1238	7.4 g/10 min
Density	D 1505	921 kg/m <sup>3</sup> (0.921 g/cm <sup>3</sup> )
Vicat Softening Temperature	D 1525	93°C (199°F)
Brittleness Temperature	D 746	-73°C (-99°F)
Tensile Stress @ Yield 500 mm/min (20 in./min)	D 638 Type IV Specimen	10.3 MPa (1500 psi)
Tensile Stress @ Break 500 mm/min (20 in./min)	D 638 Type IV Specimen	9.7 MPa (1400 psi)
Elongation @ Break 500 mm/min (20 in./min)	D 638 Type IV Specimen	400%
Flexural Modulus (2% Secant) 12.7 mm/min (0.5 in./min)	D 790	207 MPa (30000 psi)

<sup>a</sup> Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

<sup>b</sup> Unless noted otherwise, the test method is ASTM.

<sup>c</sup> Units are in SI or US customary units.

#### **Applications**

EASTMAN polyethylene 1870A is a low density formulation with excellent flow characteristics for injection molding. It is used for such applications as container closures that require stress-crack resistance. EASTMAN polyethylene 1870E is used for general-purpose extrusion applications. This formula complies with FDA regulations at 21 CFR 177.1520(c)(2.2) for cooking applications. Users must make their own determination that their use of this product is safe, legal, and technically suitable for their intended applications.

#### **Comments**

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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