



# ENGAGE™ 8480 Polyolefin Elastomer

**Overview** ENGAGE™ 8480 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in footwear applications and profile extrusion of tubing and hoses. It has good clarity, toughness, and flexibility.

ENGAGE 8480 also has excellent compatibility with other polyolefins, allowing for efficient blending and coextrusion.

**Main Characteristics:**

- Pellet form
- Good clarity, toughness, and flexibility

**Applications:**

- Footwear
- Cross-linked foams
- Blends
- Profile extrusion tubing and hoses

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.902 g/cm <sup>3</sup>	0.902 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	20 MU	20 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant (Compression Molded)	1160 psi	8.00 MPa	ASTM D638 <sup>1</sup>
Tensile Strength (Break, Compression Molded)	3600 psi	24.8 MPa	ASTM D638 <sup>1</sup>
Tensile Elongation			ASTM D638 <sup>1</sup>
Break, Compression Molded	660 %	660 %	
Flexural Modulus			ASTM D790
1% Secant: Compression Molded	12100 psi	83.1 MPa	
2% Secant: Compression Molded	11800 psi	81.5 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength	521 lbf/in	91.2 kN/m	ASTM D624 <sup>2</sup>
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Compression Molded	89	89	
Shore D, 1 sec, Compression Molded	42	42	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature (DSC)	-23.8 °F	-31.0 °C	Dow Method
Vicat Softening Temperature	192 °F	89.0 °C	ASTM D1525
Melting Temperature (DSC)	210 °F	99.0 °C	Dow Method <sup>3</sup>
Peak Crystallization Temperature (DSC)	183 °F	84.0 °C	Dow Method

**Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>1</sup> 20 in/min (510 mm/min)

<sup>2</sup> Die C

<sup>3</sup> 10°C/min

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