



# ENGAGE™ 8401

## Polyolefin Elastomer

**Overview** ENGAGE™ 8401 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable, flexible injection molded industrial and consumer goods.

ENGAGE 8401 provides high clarity in products requiring visual inspection and allows the use of hot runner molds to enhance production efficiency. In addition, its low density can help control resin and production costs, while reducing the weight of end products.

Main Characteristics:

- Pellet form
- Excellent flow characteristics
- High clarity
- Reduced part weight

Applications:

- Injection molded industrial and consumer durable goods
- Impact modification

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.885 g/cm <sup>3</sup>	0.885 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	30 g/10 min	30 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	2 MU	2 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant <sup>1</sup> (Compression Molded)	580 psi	4.00 MPa	ASTM D638
Tensile Strength <sup>1</sup> (Break, Compression Molded)	1230 psi	8.50 MPa	ASTM D638
Tensile Elongation <sup>1</sup> Break, Compression Molded	940 %	940 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : Compression Molded	4450 psi	30.7 MPa	
2% Secant : Compression Molded	4440 psi	30.6 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength <sup>2</sup>	321 lbf/in	56.2 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Compression Molded	84	84	
Shore D, 1 sec, Compression Molded	26	26	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature	-52.6 °F	-47.0 °C	Dow Method
Vicat Softening Temperature	120 °F	49.0 °C	ASTM D1525
Melting Temperature (DSC) <sup>3</sup>	176 °F	80.0 °C	Dow Method
Peak Crystallization Temperature (DSC)	138 °F	59.0 °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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