



# ENGAGE™ 8207 Polyolefin Elastomer

**Overview** ENGAGE™ 8207 Polyolefin Elastomer is an ethylene-octene copolymer that has excellent flow characteristics and performs well in a wide range of general purpose thermoplastic elastomer applications.

ENGAGE 8207 provides superb impact properties in blends with polypropylene (PP) and polyethylene (PE), especially in applications requiring slightly higher melt flow. ENGAGE 8207 also provides high filler loading capability, excellent electrical properties, and (when cross-linked) exceptional heat aging, compression set, and weather resistance properties.

**Main Characteristics:**

- Pellet form
- Excellent flow characteristics
- High filler loading
- Excellent electrical properties
- Improved impact in polypropylene and polyethylene
- Exceptional heat aging, compression set, and weather resistance when cured
- Talc dusted (untreated, 1 µm)

**Applications:**

- General purpose thermoplastic elastomers
- Impact modification
- Wire and cable

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.870 g/cm <sup>3</sup>	0.870 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	8 MU	8 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant (Compression Molded)	334 psi	2.30 MPa	ASTM D638 <sup>1</sup>
Tensile Strength (Break, Compression Molded)	827 psi	5.70 MPa	ASTM D638 <sup>1</sup>
Tensile Elongation			ASTM D638 <sup>1</sup>
Break, Compression Molded	1100 %	1100 %	
Flexural Modulus			ASTM D790
1% Secant: Compression Molded	1580 psi	10.9 MPa	
2% Secant: Compression Molded	1570 psi	10.8 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength	212 lbf/in	37.1 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	66	66	
Shore D, 1 sec, Compression Molded	17	17	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature (DSC)	-63.4 °F	-53.0 °C	Dow Method
Vicat Softening Temperature	98.6 °F	37.0 °C	ASTM D1525
Melting Temperature (DSC)	138 °F	59.0 °C	Dow Method <sup>3</sup>
Peak Crystallization Temperature (DSC)	111 °F	44.0 °C	Dow Method

**Additional Information**

Properties measured on product without talc dusting.

**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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