



# ENGAGE™ 8137 Polyolefin Elastomer

**Overview** ENGAGE™ 8137 Polyolefin Elastomer is an ethylene-octene copolymer with low density and a high melt index. This combination provides excellent toughness, flexibility, and ease in processing and makes ENGAGE 8137 highly effective as an impact modifier in polyolefins or as a component in injection molding applications.

**Main Characteristics:**

- Pellet form
- Low density
- Excellent flow characteristics
- Toughness, flexibility
- Talc dusted (untreated, 1 µm)

**Applications:**

- Injection molded industrial and consumer durable goods
- Impact modification

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.864 g/cm <sup>3</sup>	0.864 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	13 g/10 min	13 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	4 MU	4 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant (Compression Molded)	261 psi	1.80 MPa	ASTM D638 <sup>1</sup>
Tensile Strength (Break, Compression Molded)	348 psi	2.40 MPa	ASTM D638 <sup>1</sup>
Tensile Elongation			ASTM D638 <sup>1</sup>
Break, Compression Molded	800 %	800 %	
Flexural Modulus			ASTM D790
1% Secant: Compression Molded	1130 psi	7.80 MPa	
2% Secant: Compression Molded	1060 psi	7.30 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength	151 lbf/in	26.4 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	63	63	
Shore D, 1 sec, Compression Molded	13	13	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature (DSC)	-67.0 °F	-55.0 °C	Dow Method
Melting Temperature (DSC)	133 °F	56.0 °C	Dow Method <sup>3</sup>
Peak Crystallization Temperature (DSC)	100 °F	38.0 °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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<b>North America</b>		<b>Europe/Middle East</b>	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+32-3-450-2240
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
<b>Latin America</b>		<b>South Africa</b>	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	<b>Asia Pacific</b>	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

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