



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 ³	0.864 g/cm ³	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 ¹ (Compression Molded)	261 psi	1.80 MPa	ASTM D638
Tensile Strength ¹ (Break, Compression Molded)	348 psi	2.40 MPa	ASTM D638
Tensile Elongation ¹ Break, Compression Molded	800 %	800 %	ASTM D638
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 ²	151 lbf/in	26.4 kN/m	ASTM D624
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	-67.0 °F	-55.0 °C	Dow Method
Melting Temperature (DSC) ³	133 °F	56.0 °C	Dow Method
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.

¹ 20 in/min (510 mm/min)

² Die C

³ 10°C/min

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