



ENGAGE™ 8407

Polyolefin Elastomer

Overview

ENGAGE™ 8407 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable injection molded industrial and consumer goods and compression molded gaskets.

ENGAGE 8407 provides high clarity in products requiring visual inspection and allows the use of hot runner molds to enhance production efficiency. In addition, the low density can help control resin and production costs, while reducing the weight of end products. ENGAGE 8407 also provides good impact properties in blends with polypropylene (PP) and polyethylene (PE), especially in applications requiring high melt flow modifiers.

Main Characteristics:

- Pellet form
- Excellent flow characteristics
- Improved impact in polypropylene and polyethylene

Applications:

- Injection molded industrial and consumer durable goods
- Impact modification

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.870 g/cm ³	0.870 g/cm ³	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 Strength ¹ (Break, Compression Molded)	479 psi	3.30 MPa	ASTM D638
Tensile Elongation ¹ Break, Compression Molded	1000 %	1000 %	ASTM D638
Flexural Modulus - 2% Secant (Compression Molded)	1750 psi	12.1 MPa	ASTM D790
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Compression Molded	72	72	
Shore D, 1 sec, Compression Molded	20	20	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature	-65.2 °F	-54.0 °C	Dow Method
Vicat Softening Temperature	106 °F	41.0 °C	ASTM D1525
Melting Temperature (DSC) ²	140 °F	60.0 °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 10°C/min

