



# ENGAGE™ HM 7487 Polyolefin Elastomer

## Overview

ENGAGE™ HM 7487 Polyolefin Elastomer is an ethylene-butene copolymer with higher molecular weight, better toughness, and higher melt strength than other commercially available polyolefin elastomers. It can serve as an extender for SEBS, impart lower gloss in hard TPOs, provide the basis for flexible soft-touch compounds, and is well suited for extruded applications such as wire and cable. ENGAGE HM 7487 is also useful for impact modification of various thermoplastic resins.

### Main Characteristics:

- Pellet form
- High melt strength
- Improved toughness
- Talc dusted (untreated, 1 µm)

### Applications:

- Polymer modification
- Extender for SEBS
- Soft-touch compounds
- Reduced gloss TPOs
- Wire and cable
- Impact modification

### Complies with:

- U.S. FDA FCN 368

Consult the regulation for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.860 g/cm <sup>3</sup>	0.860 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	< 0.50 g/10 min	< 0.50 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	47 MU	47 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638 <sup>1</sup>
Break, Compression Molded	348 psi	2.40 MPa	
100% Strain, Compression Molded	218 psi	1.50 MPa	
Tensile Elongation			ASTM D638 <sup>1</sup>
Break, Compression Molded	> 600 %	> 600 %	
Flexural Modulus			ASTM D790
1% Secant: Compression Molded	276 psi	1.90 MPa	
2% Secant: Compression Molded	174 psi	1.20 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength	160 lbf/in	28.0 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	58	58	
Shore D, 1 sec, Compression Molded	14	14	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature (DSC)	-70.6 °F	-57.0 °C	Dow Method
Melting Temperature (DSC)	98.6 °F	37.0 °C	Dow Method <sup>3</sup>
Peak Crystallization Temperature (DSC)	62.6 °F	17.0 °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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<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

[www.dowplastics.com](http://www.dowplastics.com)

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