



ENGAGE™ 8540 Polyolefin Elastomer

Overview ENGAGE™ 8540 Polyolefin Elastomer is an ethylene-octene copolymer that is well suited to foamed applications and offers excellent performance for profile extrusion of tubing and hoses.

It has good clarity, toughness, and flexibility. ENGAGE 8540 also has excellent compatibility with other polyolefins, allowing for efficient blending and coextrusion.

Main Characteristics:

- Pellet form
- Good clarity, toughness, and flexibility
- Excellent compatibility with polyolefins

Complies with:

- EU, No 10/2011
- Japan Hygienic Olefin and Styrene Plastics Association
- U.S. FDA FCN 424

Applications:

- Blends
- Foams
- Coextrusion
- Profile extrusion and tubing

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.908 g/cm ³	0.908 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	20 MU	20 MU	ASTM D1646
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus - 100% Secant ¹ (Compression Molded)	1390 psi	9.60 MPa	ASTM D638
Tensile Strength ¹ (Break, Compression Molded)	4050 psi	27.9 MPa	ASTM D638
Tensile Elongation ¹ Break, Compression Molded	750 %	750 %	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : Compression Molded	16500 psi	114 MPa	
2% Secant : Compression Molded	15600 psi	108 MPa	
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength ²	589 lbf/in	103 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Compression Molded	90	90	
Shore D, 1 sec, Compression Molded	47	47	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Glass Transition Temperature	-25.6 °F	-32.0 °C	Dow Method
Vicat Softening Temperature	207 °F	97.0 °C	ASTM D1525
Melting Temperature (DSC) ³	219 °F	104 °C	Dow Method
Peak Crystallization Temperature (DSC)	194 °F	90.0 °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.

¹ 20 in/min (510 mm/min)

² Die C

³ 10°C/min

