

ENGAGE™ 8480 Polyolefin Elastomer

Overview ENGAGE[™] 8480 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in footwear applications and profile extrusion of tubing and hoses. It has good clarity, toughness, and flexibility.

ENGAGE 8480 also has excellent compatibility with other polyolefins, allowing for efficient blending and coextrusion.

Main Characteristics:

- Pellet form
- · Good clarity, toughness, and flexibility

Applications:

- Footwear
- Cross-linked foams
- Blends
- Profile extrusion tubing and hoses

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.902	g/cm³	0.902	g/cm³	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)	1160	psi	8.00	MPa	ASTM D638
Tensile Strength ¹ (Break, Compression Molded)	3600	psi	24.8	MPa	ASTM D638
Tensile Elongation ¹					ASTM D638
Break, Compression Molded	660	%	660	%	
Flexural Modulus					ASTM D790
1% Secant : Compression Molded	12100	psi	83.1	MPa	
2% Secant : Compression Molded	11800	psi	81.5	MPa	
Elastomers	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tear Strength ²	521	lbf/in	91.2	kN/m	ASTM D624
Hardness	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	89		89		
Shore D, 1 sec, Compression Molded	42		42		
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Glass Transition Temperature	-23.8	°F	-31.0	°C	Dow Method
Vicat Softening Temperature	192	°F	89.0	°C	ASTM D1525
Melting Temperature (DSC) ³	210	°F	99.0	°C	Dow Method
Peak Crystallization Temperature (DSC)	183	°F	84.0	°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

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