

ENGAGE™ 7447 Polyolefin Elastomer

Overview

ENGAGE™ 7447 is a high ethylene butene melt flow, low density copolymer designed for use alone or in combination with our other elastomers to provide the tailored solutions in polymer modifications applications.

Main Characteristics:

- · Pellet form
- · Low Density
- Talc dusted (untreated, 1µm)

Applications:

- · Polymer modification
- Blends

Complies with Government / Industry Standards:

- FDA FCN 368
- EU, No 10/2011

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.865	g/cm³	0.865	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	5.0	g/10 min	5.0	g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	7	MU	7	MU	ASTM D1646
Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tensile Modulus - 100% Secant ¹ (Compression Molded)	247	psi	1.70	MPa	ASTM D638
Tensile Strength ¹ (Break, Compression Molded)	348	psi	2.40	MPa	ASTM D638
Tensile Elongation ¹					ASTM D638
Break, Compression Molded	550	%	550	%	
Flexural Modulus					ASTM D790
1% Secant : Compression Molded	1130	psi	7.80	MPa	
2% Secant : Compression Molded	1100	psi	7.60	MPa	
Elastomers	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tear Strength ²	142	lbf/in	24.8	kN/m	ASTM D624
Hardness	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	64		64		
Shore D, 1 sec, Compression Molded	12		12		
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Glass Transition Temperature	-63.4	°F	-53.0	°C	Dow Method
Melting Temperature (DSC) ³	95.0	°F	35.0	°C	Dow Method
Peak Crystallization Temperature (DSC)	84.2	°F	29.0	°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.

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¹ 20 in/min (510 mm/min)

² Die C

^{3 10°}C/min

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