ENGAGE™ 8137
Polyolefin Elastomer

Overview

ENGAGE™ 8137 Polyolefin Elastomer is an ethylene-octene copolymer with low density and a high melt index. This combination provides excellent toughness, flexibility, and ease in processing and makes ENGAGE 8137 highly effective as an impact modifier in polyolefins or as a component in injection molding applications.

Main Characteristics:

- Pellet form
- Low density
- Excellent flow characteristics
- Toughness, flexibility
- Talc dusted (untreated, 1 µm)

Applications:

- Injection molded industrial and consumer durable goods
- Impact modification

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.864	g/cm³	0.864	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	13	g/10 min	13	g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	4	MU	4	MU	ASTM D1646
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus - 100% Secant [1] (Compression Molded)	261	psi	1.80	MPa	ASTM D638
Tensile Strength [1] (Break, Compression Molded)	348	psi	2.40	MPa	ASTM D638
Tensile Elongation [1]					ASTM D638
Break, Compression Molded	800	%	800	%	
Flexural Modulus					ASTM D790
1% Secant : Compression Molded	1130	psi	7.80	MPa	
2% Secant : Compression Molded	1060	psi	7.30	MPa	
Elastomers	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tear Strength [2]	151	lbf/in	26.4	kN/m	ASTM D624
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	63		63		
Shore D, 1 sec, Compression Molded	13		13		
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Glass Transition Temperature	-67.0	°F	-55.0	°C	Dow Method
Melting Temperature (DSC) [3]	133	°F	56.0	°C	Dow Method
Peak Crystallization Temperature (DSC)	100	°F	38.0	°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] Die C

[3] 10°C/min