Technical Information

ENGAGE™ 8407
Polyolefin Elastomer

Overview

ENGAGE™ 8407 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable injection molded industrial and consumer goods and compression molded gaskets.

ENGAGE 8407 provides high clarity in products requiring visual inspection and allows the use of hot runner molds to enhance production efficiency. In addition, the low density can help control resin and production costs, while reducing the weight of end products. ENGAGE 8407 also provides good impact properties in blends with polypropylene (PP) and polyethylene (PE), especially in applications requiring high melt flow modifiers.

Main Characteristics:

- Pellet form
- Excellent flow characteristics
- Improved impact in polypropylene and polyethylene
- 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	0.870	g/cm³	0.870	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	30	g/10 min	30	g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	2	MU	2	MU	ASTM D1646
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength [1] (Break, Compression Molded)	479	psi	3.30	MPa	ASTM D638
Tensile Elongation [1]					ASTM D638
Break, Compression Molded	1000	%	1000	%	
Flexural Modulus - 2% Secant (Compression Molded)	1750	psi	12.1	MPa	ASTM D790
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	72		72		
Shore D, 1 sec, Compression Molded	20		20		
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Glass Transition Temperature	-65.2	°F	-54.0	°C	Dow Method
Vicat Softening Temperature	106	°F	41.0	°C	ASTM D1525
Melting Temperature (DSC) [2]	140	°F	60.0	°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] 10°C/min

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