



Technical Data Sheet

ENGAGE™ 8185 Polyolefin Elastomer

Overview

ENGAGE™ 8185 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable, flexible injection molded industrial and consumer goods.

ENGAGE™ 8185 Polyolefin Elastomer provides high clarity in products requiring visual inspection and allows the use of hot runner molds to enhance production efficiency. In addition, its low density can help control resin and production costs, while reducing the weight of end products.

Main Characteristics:

- Pellet form
- Excellent flow characteristics
- High clarity
- Reduced part weight

Applications:

- Injection molding
- Impact modification

Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.885	g/cm ³	0.885	g/cm ³	ASTM D792
Melt Index (190°C/12.16 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					
Tensile Modulus - 100% Secant ¹ (Compression Molded)	580	psi	4.00	MPa	ASTM D638
Tensile Strength ² (Break, Compression Molded)	1230	psi	8.50	MPa	ASTM D638
Tensile Elongation ² Break, Compression Molded	940	%	940	%	ASTM D638
Flexural Modulus					ASTM D790
1% Secant : Compression Molded	4450	psi	30.7	MPa	
2% Secant : Compression Molded	4450	psi	30.6	MPa	

1. ASTM: American Society for Testing and Materials.
2. 20 in/min (510 mm/min)

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



Properties (Cont.)

Elastomers	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tear Strength ³	321	lbf/in	56.2	kN/m	ASTM D624
Hardness					
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	84		84		
Shore D, 1 sec, Compression Molded	26		26		
Thermal					
Glass Transition Temperature	-52.6	°F	-47.0	°C	Dow Method
Vicat Softening Temperature	120	°F	49.0	°C	
Melting Temperature (DSC) ⁴	176	°F	80.0	°C	Dow Method
Peak Crystallization Temperature (DSC)	138	°F	59.0	°C	Dow Method

3. Die C
4. 10°C/min

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