

## ENGAGE™ 8200 Polyolefin Elastomer

### Overview

ENGAGE™ 8200 Polyolefin Elastomer is an ethylene-octene copolymer that has excellent flow characteristics and performs well in a wide range of general purpose thermoplastic elastomer applications.

ENGAGE 8200 provides superb impact properties in blends with polypropylene (PP) and polyethylene (PE), especially in applications requiring slightly higher melt flow. ENGAGE 8200 also provides high filler loading capability, excellent electrical properties, and (when cross-linked) exceptional heat aging, compression set, and weather resistance properties.

#### Main Characteristics:

- · Pellet form
- · Excellent flow characteristics
- · High filler loading
- · Excellent electrical properties
- · Improved impact in polypropylene and polyethylene
- · Exceptional heat aging, compression set, and weather resistance when cured

### Applications:

- · General purpose thermoplastic elastomers
- Impact modification
- Wire and cable

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)	5.0	g/10 min	5.0	g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 250°F (121°C))	8	MU	8	MU	ASTM D1646
Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tensile Modulus - 100% Secant (Compression Molded)	334	psi	2.30	MPa	ASTM D638 <sup>1</sup>
Tensile Strength (Break, Compression Molded)	827	psi	5.70	MPa	ASTM D638 <sup>1</sup>
Tensile Elongation					ASTM D638 <sup>1</sup>
Break, Compression Molded	1100	%	1100	%	
Flexural Modulus					ASTM D790
1% Secant: Compression Molded	1580	psi	10.9	MPa	
2% Secant: Compression Molded	1570	psi	10.8	MPa	
Elastomers	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tear Strength	212	lbf/in	37.1	kN/m	ASTM D624 <sup>2</sup>
Hardness	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	66		66		
Shore D, 1 sec, Compression Molded	17		17		
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Glass Transition Temperature (DSC)	-63.4	°F	-53.0	°C	Dow Method
Vicat Softening Temperature	98.6	°F	37.0	°C	ASTM D1525
Melting Temperature (DSC)	138	°F	59.0	°C	Dow Method <sup>3</sup>
Peak Crystallization Temperature (DSC)	111	°F	44.0	°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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<sup>&</sup>lt;sup>1</sup> 20 in/min (510 mm/min)

<sup>&</sup>lt;sup>2</sup> Die C

<sup>3 10°</sup>C/min

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