

Technical Data

Product Description

ENGAGE™ 8402 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable, flexible injection molded industrial and consumer goods.

ENGAGE 8402 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 molded industrial and consumer durable goods
- Impact modification

Complies with:

- EU, No 10/2011
- U.S. FDA 177.1520(c)3.2c
- U.S. FDA DMF

Consult the regulations for complete details.

General

Material Status	• Commercial: Active		
Search for UL Yellow Card	• The Dow Chemical Company		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Agency Ratings	• DMF	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.2c
Forms	• Pellets		

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	0.902 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	30 g/10 min	ASTM D1238
Mooney Viscosity (ML 1+4, 121°C)	2 MU	ASTM D1646
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus - 100% Secant ² (Compression Molded)	6.70 MPa	ASTM D638
Tensile Strength ² (Break, Compression Molded)	11.3 MPa	ASTM D638
Tensile Elongation ² Break, Compression Molded	910 %	ASTM D638
Flexural Modulus 1% Secant : Compression Molded 2% Secant : Compression Molded	72.6 MPa 72.0 MPa	ASTM D790
Elastomers	Nominal Value Unit	Test Method
Tear Strength ³	79.1 kN/m	ASTM D624
Hardness	Nominal Value Unit	Test Method
Durometer Hardness Shore A, 1 sec, Compression Molded Shore D, 1 sec, Compression Molded	88 34	ASTM D2240
Thermal	Nominal Value Unit	Test Method
Glass Transition Temperature	-36.0 °C	Internal Method
Vicat Softening Temperature	72.2 °C	ASTM D1525
Melting Temperature (DSC) ⁴	96.0 °C	Internal Method
Peak Crystallization Temperature (DSC)	80.4 °C	Internal Method



Notes

¹ Typical properties: these are not to be construed as specifications.

² 510 mm/min

³ Die C

⁴ 10°C/min



Where to Buy

Supplier

The Dow Chemical Company

Telephone: +1-800-258-2436 (Americas); 00800-3-694-6367 (Europe, Middle East, Africa, and India); +800-7776-7776 (Asia Pacific)
Web: <http://www.dow.com>

Distributor

Entec Polymers

Contact Entec Polymers for availability of individual products by country.

Telephone: 833-319-0299

Web: [https://www.entecpolymers.com/?](https://www.entecpolymers.com/?utm_source=ul&utm_medium=paid%20association&utm_campaign=entec%20%7C%20entec%201&utm_term=ul%20%7C%20where%20to%20buy)

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Availability: Latin America, North America

Entec Polymers Latin America

Contact Entec Polymers for availability of individual products by country.

Web: <https://www.entecpolymers.com/>

Availability: Latin America

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Availability: Europe