ENGAGE™ 8401

Polyolefin Elastomer

The Dow Chemical Company

Message:

ENGAGE™ 8401 Polyolefin Elastomer is an ethylene-octene copolymer that offers excellent performance in durable, flexible injection molded industrial and consumer goods.

ENGAGE 8401 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

General Information				
Forms	Pellets			
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	0.885	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	
Hardness	Nominal Value	Unit	Test Method	
Durometer Hardness			ASTM D2240	
Shore A, 1 sec, Compression Molded	84			
Shore D, 1 sec, Compression Molded	26			
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus - 100% Secant ¹ (Compression Molded)	4.00	МРа	ASTM D638	
Tensile Strength ² (Break, Compression Molded)	8.50	МРа	ASTM D638	
Tensile Elongation ³ (Break, Compression Molded)	940	%	ASTM D638	
Flexural Modulus			ASTM D790	
1% Secant : Compression Molded	30.7	MPa		
2% Secant : Compression Molded	30.6	MPa		
Elastomers	Nominal Value	Unit	Test Method	
Tear Strength ⁴	56.2	kN/m	ASTM D624	
Thermal	Nominal Value	Unit	Test Method	
Glass Transition Temperature	-47.0	°C	Internal Method	
Vicat Softening Temperature	49.0	°C	ASTM D1525	
Melting Temperature (DSC) ⁵	80.0	°C	Internal Method	
Peak Crystallization Temperature (DSC)	59.0	°C	Internal Method	

NOTE	
1.	510 mm/min
2.	510 mm/min
3.	510 mm/min
4.	Die C
5.	10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

