

## **Dow Engage® 8842 Polyolefin Elastomer**

Category: Polymer, Thermoplastic, Elastomer, TPE, Thermoplastic Elastomer, Melt-Processible Rubber

## **Material Notes:**

Description: Engage® 8842 polyolefin elastomer is an ultra-low density ethylene-octene copolymer with a nominal loose talc surface coating. The talc is untreated and has a nominal 1 µm particle size. This product offers the exceptional properties of an ultra-low density elastomer with the added potential of handling this polymer in pellet form. Engage® 8842 has excellent flow characteristics and provides good impact properties in blends with polypropylene (PP) and polyethylene (PE). It performs well in TPO applications where superior low temperature impact properties are desired. Talc addition significantly improves ability to handle the polymer, but severe blocking can occur if the material is stored under severe conditions (i.e., long duration, elevated temperatures, and/or high weight loadings). To minimize temperature effects, product should be stored at temperatures well below its melting point of 33°C, most preferably below 29°C.Information provided by manufacturer. This former DuPont Dow Elastomers product line is now produced by Dow Chemical.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Dow-Engage-8842-Polyolefin-Elastomer.php

Physical Properties	Metric	English	Comments
Density	0.857 g/cc	0.0310 lb/in³	ASTM D792
Mooney Viscosity	27	27	ML 1 + 4; ASTM D1646
	@Temperature 125 °C	@Temperature 257 °F	
Melt Index of Compound	1.0 g/10 min	1.0 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	50	50	ASTM D2240
Tensile Strength, Ultimate	2.10 MPa	305 psi	508 mm/min; ASTM D638
Tensile Strength, Yield	0.830 MPa	120 psi	508 mm/min; ASTM D638
Elongation at Break	975 %	975 %	508 mm/min; ASTM D638
2% Secant Modulus	0.00350 GPa	0.508 ksi	ASTM D790

Thermal Properties	Metric	English	Comments
Melting Point	33.0 °C	91.4 °F	DSC, 10°C/min; DuPont Test
Brittleness Temperature	<= -76.0 °C	<= -105 °F	ASTM D746

Descriptive Properties	Value	Comments
Comonomer Content	45 wt%	Dow Method ( <sup>13</sup> C NMR/FTIR)



**Descriptive Properties** 

Value

Comments

## **Contact Songhan Plastic Technology Co.,Ltd.**

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