

ENGAGE 8150

Polyolefin Elastomer

ENGAGE[™] 8150 Polyolefin Elastomer is an ethylene-octene copolymer that has excellent flow characteristics and provides superb impact properties in blends with polypropylene (PP) and polyethylene (PE) and is widely used in TPO applications where excellent low temperature impact properties are desired.

ENGAGE 8150 provides high filler loading capability and outstanding peroxide cure capability. When cross-linked by peroxide, silane, or irradiation, it gives exceptional heat aging, compression set, and weather resistance properties and may be used to produce high performance electrical insulation.

Main Characteristics

- Pellet form
- Excellent flow characteristics
- Improved impact in polypropylene
 and polyethylene
- High filler loading

Applications

- General purpose thermoplastic elastomers
 Impact modification
- Impact modification

- Peroxide, silane, and radiation curable
- Exceptional heat aging, compression set, and weather resistance when cured
- Thermoplastic olefins (TPO)
- Wire and cable

Properties (1)
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Properties			
Typical Physical	Test Method	Value	
Melt Index, 190°C/2.16 kg, dg/min	ASTM D 1238	0.5	
Density, g/cm ³	ASTM D 792	0.868	
Mooney Viscosity,	ASTM D 1646		
ML 1 + 4 @ 121°C		33	
Typical Molded ⁽²⁾			
Ultimate Tensile Strength, MPa	ASTM D 638 ⁽³⁾	9.5	
Ultimate Tensile Elongation, %	ASTM D 638 ⁽³⁾	810	
100% Modulus, MPa	ASTM D 638 ⁽³⁾	2.6	
Hardness	ASTM D 2240		
Shore A		70	
Shore D		20	
Flexural Modulus, MPa	ASTM D 790		
1% Secant		15.2	
2% Secant		14.4	
Tear Strength, Type C, kN/m	ASTM D 624	37.3	
Typical Thermal			
Vicat Softening Point, °C	ASTM D 1525	46	
DSC Melting Point,	Dow Method		
10°C/min rate, °C		55	
Glass Transition Temperature, °C	Dow Method	-52	
Tc Peak, °C	Dow Method	42	

(1) These are typical properties only and are not to be regarded as sales specifications.

(2) Compression molded

(3) 508 mm/min

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Additional Information	North America U.S. & Canada: Mexico:	1-800-441-4369 1-989-832-1426 +1-800-441-4369	Europe/Middle East	+800-3694-6367 +32-3-450-2240	
	Latin America Argentina: Brazil: Colombia:	+54-11-4319-0100 +55-11-5188-9222 +57-1-319-2100	South Africa Asia Pacific	+800-797-5078 +800-7776-7776	
www.dowplastics.com	Mexico: Published August 20	+52-55-5201-4700		+60-3-7958-3392	

