



ENGAGE 8100

Polyolefin Elastomer

ENGAGE™ 8100 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 8100 provides superb impact properties in blends with polypropylene (PP) and polyethylene (PE). ENGAGE 8100 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
- Peroxide, silane, and radiation curable
- Exceptional heat aging, compression set, and weather resistance when cured

Applications

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

Properties⁽¹⁾

Typical Physical	Test Method	Value
Melt Index, 190°C/2.16 kg, dg/min	ASTM D 1238	1.0
Density, g/cm ³	ASTM D 792	0.870
Mooney Viscosity, ML 1 + 4 @ 121°C	ASTM D 1646	24
Typical Molded⁽²⁾		
Ultimate Tensile Strength, MPa	ASTM D 638 ⁽³⁾	9.8
Ultimate Tensile Elongation, %	ASTM D 638 ⁽³⁾	810
100% Modulus, MPa	ASTM D 638 ⁽³⁾	2.9
Hardness	ASTM D 2240	
Shore A		73
Shore D		22
Flexural Modulus, MPa	ASTM D 790	
1% Secant		14.3
2% Secant		13.1
Tear Strength, Type C, kN/m	ASTM D 624	40
Typical Thermal		
Vicat Softening Point, °C	ASTM D 1525	45
DSC Melting Point, 10°C/min rate, °C	Dow Method	60
Glass Transition Temperature, °C	Dow Method	-52
Tc Peak, °C	Dow Method	45

(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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