

ENGAGE™ 11547 Polyolefin Elastomer

Overview

ENGAGE™ 11547 is a polyolefin elastomer offering high flow and excellent rubber loading efficiency as superior impact modifier in thermoplastic polyolefin (TPO) compounds. Its improved toughening capability compared to other commercially available polyolefin elastomers allows for greater ease in optimizing elastomer levels to meet impact requirements for global automotive specifications. TPO formulations containing ENGAGE 11547 combine very good processing behavior with an excellent stiffness/toughness balance for automotive parts, such as bumper fascia. The design of the ENGAGE 11547 polyolefin elastomer enables shorter injection molding cycle time for the TPO compound. Its design characteristics contribute to morphology control and improved temperature resistance for final parts.

Main Characteristics:

- High rubber loading efficiency for optimum cost/performance balance
- Improved toughness for better stiffness/toughness balance
- · Very good flow characteristics
- · High crystallization temperature for short cycle time
- · High melting point for improved temperature resistance
- · Pellet form with partitioning agent for ease of handling

Applications:

- · Impact Modification of TPO
- · Injection molded polyolefin compounds

Additive

· Antiblock: No

· Slip: No

· Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.866	g/cm³	0.866	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	5.0	g/10 min	5.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tensile Modulus - 100% Secant (Compression Molded)	218	psi	1.50	MPa	ASTM D638
Tensile Strength (Break, Compression Molded)	421	psi	2.90	MPa	ASTM D638
Tensile Elongation					ASTM D638
Break, Compression Molded	1200	%	1200	%	
Elastomers	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tear Strength	126	lbf/in	22.0	kN/m	ASTM D624
Hardness	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Durometer Hardness					ASTM D2240
Shore A, Compression Molded	60		60		
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Glass Transition Temperature	-79.6	°F	-62.0	°C	Dow Method
Melting Temperature (DSC)	246	°F	119	°C	Dow Method

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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Additional Information

North America		Europe/Middle East	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+31-11567-2626
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
Latin America		South Africa	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	Asia Pacific	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

www.dowplastics.com

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