ENGAGE™ 11527
Polyolefin Elastomer

Overview

ENGAGE™ 11527 is a polyolefin elastomer offering very high flow and excellent rubber loading efficiency as impact modifier in thermoplastic polyolefin (TPO) compounds. Its improved toughening efficiency compared to other commercially available polyolefin elastomers allows for greater ease in optimizing elastomer levels to meet impact resistance requirements in global automotive specifications. TPO formulations containing ENGAGE 11527 combine excellent processing behavior with very good stiffness/toughness balance for automotive parts, such as bumper fascia. The design of ENGAGE 11527 polyolefin elastomer enables shortening the 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
- Excellent flow characteristics
- Demonstrated improved 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)	15	g/10 min	15	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus - 100% Secant (Compression Molded)	189	psi	1.30	MPa	ASTM D638
Tensile Strength (Break, Compression Molded)	174	psi	1.20	MPa	ASTM D638
Tensile Elongation					ASTM D638
Break, Compression Molded	1200	%	1200	%	
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Durometer Hardness					ASTM D2240
Shore A, 1 sec, Compression Molded	55		55		
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Glass Transition Temperature	-79.6	°F	-62.0	°C	Dow Method
Melting Temperature (DSC)	244	°F	118	°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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