



DOW™ LDPE 555E

Low Density Polyethylene Resin

Overview DOW LDPE 555E is a low density polyethylene resin with a fractional melt index especially designed for shrink films and industrial and consumer blown films. This resin provides exceptional bubble stability, high levels of shrink, excellent balance of stiffness, toughness and tear resistance, and a very good clarity.

Main Characteristics:

- High output rates
- Very high shrink
- Good stiffness-toughness balance
- High puncture resistance
- High tear resistance

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.926 g/cm ³	0.926 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.30 g/10 min	0.30 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	51 µm	
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	29000 psi	200 MPa	
2% Secant, TD : 2.0 mil (51 µm)	36300 psi	250 MPa	
Tensile Strength			ASTM D882
MD : Break, 2.0 mil (51 µm)	3190 psi	22.0 MPa	
TD : Break, 2.0 mil (51 µm)	3050 psi	21.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (51 µm)	500 %	500 %	
TD : Break, 2.0 mil (51 µm)	650 %	650 %	
Dart Drop Impact (2.0 mil (51 µm))	150 g	150 g	ASTM D1709A
Elmendorf Tear Strength ¹			ASTM D1922
MD : 2.0 mil (51 µm)	250 g	250 g	
TD : 2.0 mil (51 µm)	330 g	330 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	216 °F	102 °C	ASTM D1525

Notes

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

¹ Method B

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This document is intended for use within Europe

Published: 2010-03-19

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