



DOW™ LDPE 432E

Low Density Polyethylene Resin

Overview

DOW LDPE 432E is a high clarity resin designed for lamination film and clarity overwrap applications. This resin contains slip and antiblock additives. When properly fabricated, this product displays excellent processability and draw down, and a very good balance of film impact resistance, tensile strength and tear resistance.

Main Applications:

- Lamination films
- Food packaging films

Complies with:

- U.S. FDA 21 CFR 177.1520(c)2.2
- EU, No 10/2011

Consult the regulations for complete details.

Additive

- Antiblock: 1800 ppm
- Slip: 330 ppm
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.925 g/cm ³	0.925 g/cm ³	ASTM D792
Base Density ¹	0.925 g/cm ³	0.925 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Coefficient of Friction vs. Itself - Dynamic	0.10 to 0.30	0.10 to 0.30	ASTM D1894
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	50 µm	
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (50 µm)	27600 psi	190 MPa	
2% Secant, TD : 2.0 mil (50 µm)	29000 psi	200 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (50 µm)	1450 psi	10.0 MPa	
TD : Yield, 2.0 mil (50 µm)	1600 psi	11.0 MPa	
MD : Break, 2.0 mil (50 µm)	3190 psi	22.0 MPa	
TD : Break, 2.0 mil (50 µm)	2900 psi	20.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (50 µm)	450 %	450 %	
TD : Break, 2.0 mil (50 µm)	650 %	650 %	
Dart Drop Impact (2.0 mil (50 µm))	110 g	110 g	ASTM D1709A
Elmendorf Tear Strength ²			ASTM D1922
MD : 2.0 mil (50 µm)	500 g	500 g	
TD : 2.0 mil (50 µm)	400 g	400 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.97 mil (50.0 µm))	67	67	ASTM D2457
Haze (1.97 mil (50.0 µm))	9.00 %	9.00 %	ASTM D1003

Extrusion Notes

Fabrication Conditions for Blown Film:

- Blow-up Ratio: 1.5 - 3
- Melt Temperature: 170 to 210°C

