



# DOW™ LDPE 582E

## Low Density Polyethylene Resin

### Overview

DOW LDPETM 582E Polyethylene Resin can be readily extruded using conventional blown film techniques utilising melt temperatures between 150 and 170°C. DOW LDPE 582E Polyethylene Resin, when properly fabricated, shows good mechanical properties and high optical properties. It shows very good drawdown properties and excellent processability. This product contains slip and antiblock additives.

#### Regulations:

DOW LDPE 582E Polyethylene Resin should comply with:

- U.S. FDA 21 CFR 177.1520(c) 2.2
- EU, No 10/2011
- U.S. FDA-DMF
- Consult the regulations for complete details.

#### Applications:

- Light produce bags.
- Soft goods packaging.
- Textile packaging.
- High clarity applications.

### Additive

- Antiblock
- Slip

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.923 g/cm <sup>3</sup>	0.923 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	3.5 g/10 min	3.5 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Coefficient of Friction	0.16 to 0.20	0.16 to 0.20	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)	25400 psi	175 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (50 µm)	1310 psi	9.00 MPa	
TD : Yield, 2.0 mil (50 µm)	1310 psi	9.00 MPa	
MD : Break, 2.0 mil (50 µm)	2470 psi	17.0 MPa	
TD : Break, 2.0 mil (50 µm)	2180 psi	15.0 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))	120 g	120 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (50 µm)	500 g	500 g	
TD : 2.0 mil (50 µm)	400 g	400 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	199 °F	93.0 °C	ISO 306/A
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (20°, 1.97 mil (50.0 µm))	70	70	ASTM D2457
Haze (1.97 mil (50.0 µm))	7.00 %	7.00 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	302 to 338 °F	150 to 170 °C	
Extrusion Notes			
Blow-Up ratio 1:2.5			

