



# DOW™ LLDPE 1613.11

## Linear Low Density Polyethylene Resin

### Overview

Dow LLDPE 1613.11 is a Linear Low Density Polyethylene Resin, 1-hexene copolymer, produced in the Solution process. This resin is designed to be used in blown extrusion to produce films for industrial applications and consumer packaging. It contains slip and antiblock additives.

Complies with:

- U.S. FDA, 21 CFR 177.1520(c)3.2a
- Europe Commission Regulation (EU) No 10/2011 (See NOTES)

Consult the regulations for complete details.

### Additive

- Antiblock: 2500 ppm
- Slip: 1000 ppm

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
Base Density <sup>1</sup>	0.923 g/cm <sup>3</sup>	0.923 g/cm <sup>3</sup>	Dow Method
Melt Index (190°C/2.16 kg)	1.3 g/10 min	1.3 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	51 µm	
Film Puncture Resistance	92.6 ft·lb/in <sup>3</sup>	7.66 J/cm <sup>3</sup>	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	27400 psi	189 MPa	
2% Secant, TD : 2.0 mil (51 µm)	32500 psi	224 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (51 µm)	1620 psi	11.2 MPa	
TD : Yield, 2.0 mil (51 µm)	1730 psi	11.9 MPa	
MD : Break, 2.0 mil (51 µm)	4860 psi	33.5 MPa	
TD : Break, 2.0 mil (51 µm)	4600 psi	31.7 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (51 µm)	900 %	900 %	
TD : Break, 2.0 mil (51 µm)	890 %	890 %	
Dart Drop Impact (2.0 mil (51 µm))	270 g	270 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (51 µm)	750 g	750 g	
TD : 2.0 mil (51 µm)	1100 g	1100 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 2.00 mil (50.8 µm))	42	42	ASTM D2457
Haze (2.00 mil (50.8 µm))	22.0 %	22.0 %	ASTM D1003

### Notes

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

<sup>1</sup> Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm<sup>3</sup>. Base density is the estimated density of the polymer if it did not contain any antiblock.

