



# DOWLEX™ 2645.11G

## Polyethylene Resin

**Overview** DOWLEX™ Polyethylene Resin is designed for the production of a wide variety of film applications. Films made from this resin exhibit a combination of good toughness and tear resistance.

- Complies with:
- U.S. FDA, FCN 741
  - Europe EU-Directive 2002/72/EC
  - Consult the regulations for complete details.

Slip Additive: 1200 ppm  
 Antiblock Additive: 3000 ppm

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.921 g/cm <sup>3</sup>	0.921 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	0.90 g/10 min	0.90 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.00 mil	50.8 µm	
Film Puncture Resistance			Dow Method
2.00 mil (50.8 µm)	80.0 ft-lb/in <sup>3</sup>	6.62 J/cm <sup>3</sup>	
Secant Modulus			ASTM D882
2% Secant, MD: 2.00 mil (50.8 µm)	24400 psi	168 MPa	
2% Secant, TD: 2.00 mil (50.8 µm)	34500 psi	238 MPa	
Tensile Strength			ASTM D882
MD: Yield, 2.00 mil (50.8 µm)	2060 psi	14.2 MPa	
TD: Yield, 2.00 mil (50.8 µm)	2120 psi	14.6 MPa	
MD: Break, 2.00 mil (50.8 µm)	7080 psi	48.8 MPa	
TD: Break, 2.00 mil (50.8 µm)	5680 psi	39.2 MPa	
Tensile Elongation			ASTM D882
MD: Break, 2.00 mil (50.8 µm)	660 %	660 %	
TD: Break, 2.00 mil (50.8 µm)	740 %	740 %	
Dart Drop Impact (2.00 mil (50.8 µm))	300 g	300 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD: 2.00 mil (50.8 µm)	720 g	720 g	
TD: 2.00 mil (50.8 µm)	1000 g	1000 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	225 °F	107 °C	ASTM D1525
Melting Temperature (DSC)	248 °F	120 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 2.00 mil (50.8 µm))	56	56	ASTM D2457
Haze (2.00 mil (50.8 µm))	14 %	14 %	ASTM D1003

### Extrusion Notes

- Fabrication Conditions For Blown Film:
- Screw Size: 2.5 in. (63.5 mm) 30:1L/D
  - Screw Type: DSBII
  - Die Gap: 70 mil (1.8 mm)
  - Output: 10 lb/hr/in. of die circumference
  - Die Diameter: 6 in.
  - Blow-Up Ratio: 2.5 : 1

### 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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