



DOWLEX™ GM 8085

Linear Low Density Polyethylene Resin

Overview DOWLEX™ GM 8085 Polyethylene Resin is designed for use in a wide variety of film applications, in special FFS and lamination multilayered films combining excellent optical properties, enhanced mechanicals, broad sealing window and an additive package designed to enhance COF stability.

Main Characteristics:

- High toughness, broad sealing window, processability and optical properties
- Fully formulated, enhanced COF stability

Complies with:

- U.S. FDA FCN 741

Consult the regulations for complete details.

Additive • Antiblock: 2500 ppm • Slip: 1000 ppm • Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.919 g/cm ³	0.919 g/cm ³	ASTM D792
Base Density ¹	0.917 g/cm ³	0.917 g/cm ³	Dow Method
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	2.0 mil	50 µm	
Film Puncture Resistance	387 ft·lb/in ³	32.0 J/cm ³	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD	22900 psi	158 MPa	
2% Secant, TD	26100 psi	180 MPa	
Tensile Strength			ASTM D882
MD : Yield	1000 psi	6.90 MPa	
TD : Yield	1040 psi	7.20 MPa	
MD : Break	6610 psi	45.6 MPa	
TD : Break	5410 psi	37.3 MPa	
Tensile Elongation			ASTM D882
MD : Break	850 %	850 %	
TD : Break	840 %	840 %	
Dart Drop Impact	750 g	750 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD	940 g	940 g	
TD	1100 g	1100 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	223 °F	106 °C	ASTM D1525
Melting Temperature (DSC)	244 °F	118 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss	68	68	ASTM D2457
Haze (1.97 mil (50.0 µm))	7.3 %	7.3 %	ASTM D1003



Extrusion Notes

Fabrication Conditions For Blown Film:

- Machine: Monolayer blown film extrusion line
- Monolayer Film (50 microns)
- Screw Size: 25 mm 25:1 L/D
- Die Gap: 1.8 mm
- Output: 15 kg/hr
- Die Diameter: 80mm
- 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.

¹ 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/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

² Blown

