



# DOWLEX™ 4056.01G

## Polyethylene Resin

**Overview** DOWLEX™ 4056.01G is a linear low density resin designed for high quality blown film applications requiring a combination of excellent optical properties, tear strength, sealability and excellent processability. DOWLEX 4056.01G is also designed to offer a low gel level making it ideal for use in lamination films and other specialty packaging applications. This resin contains slip and antiblock additives.

Complies with:

- EU, No 10/2011
- U.S. FDA FCN 741

Consult the regulations for complete details.

**Additive** • Antiblock: 2000 ppm • Slip: 800 ppm • Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.919 g/cm <sup>3</sup>	0.919 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	1.3 g/10 min	1.3 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Coefficient of Friction	0.15	0.15	ASTM D1894
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Puncture Energy			Dow Method
0.98 mil (25 µm)	15.0 in·lb	1.70 J	
2.0 mil (50 µm)	38.1 in·lb	4.30 J	
Film Puncture Force			Dow Method
0.98 mil (25 µm)	1.93 lbf	8.60 N	
2.0 mil (50 µm)	2.43 lbf	10.8 N	
Film Puncture Resistance			Dow Method
0.98 mil (25 µm)	1240 ft·lb/in <sup>3</sup>	103 J/cm <sup>3</sup>	
2.0 mil (50 µm)	1500 ft·lb/in <sup>3</sup>	124 J/cm <sup>3</sup>	
Dart Drop Impact			ASTM D1709A
0.98 mil (25 µm)	250 g	250 g	
2.0 mil (50 µm)	370 g	370 g	
Elmendorf Tear Strength <sup>1</sup>			ASTM D1922
MD : 0.98 mil (25 µm)	280 g	280 g	
MD : 2.0 mil (50 µm)	650 g	650 g	
TD : 0.98 mil (25 µm)	420 g	420 g	
TD : 2.0 mil (50 µm)	750 g	750 g	
Seal Initiation Temperature <sup>2</sup>			Dow Method
0.98 mil (25 µm)	221 °F	105 °C	
2.0 mil (50 µm)	221 °F	105 °C	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss			ASTM D2457
45°, 0.984 mil (25.0 µm)	65	65	
45°, 0.984 mil (25.0 µm) <sup>3</sup>	81	81	
45°, 0.984 mil (25.0 µm) <sup>4</sup>	75	75	
45°, 1.97 mil (50.0 µm)	64	64	
45°, 1.97 mil (50.0 µm) <sup>3</sup>	80	80	
45°, 1.97 mil (50.0 µm) <sup>4</sup>	71	71	



Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze			ASTM D1003
0.984 mil (25.0 μm)	6.3 %	6.3 %	
0.984 mil (25.0 μm) <sup>3</sup>	4.2 %	4.2 %	
0.984 mil (25.0 μm) <sup>4</sup>	4.2 %	4.2 %	
1.97 mil (50.0 μm)	9.6 %	9.6 %	
1.97 mil (50.0 μm) <sup>4</sup>	5.1 %	5.1 %	
1.97 mil (50.0 μm) <sup>3</sup>	5.1 %	5.1 %	

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	423 °F	217 °C

#### Extrusion Notes

Fabrication Conditions For Blown Film:

- Melt Temperature: 217°C
- Die Diameter: 200 mm.
- Blow-Up Ratio: 2 to 1

#### 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> Method B

<sup>2</sup> Temperatures at which 8.8N/25MM heat seal strength is achieved.

Heat Seal Strengths, Topwave HT Tester 0.5 S dwell, 40 psi bar pressure, pull speed (100 mm/sec).

<sup>3</sup> With 20% LDPE

<sup>4</sup> With 40% LDPE

