



DOWLEX™ 2056G

Polyethylene Resin

Overview

- Linear Low Density Polyethylene
- Improved thermal stability
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.
- Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.920 g/cm ³	0.920 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.00 mil	25.4 µm	
Film Puncture Resistance			Dow Method
1.00 mil (25.4 µm)	234 ft-lb/in ³	19.4 J/cm ³	
Film Toughness			ASTM D882
MD: 1.00 mil (25.4 µm)	1300 ft-lb/in ³	108 J/cm ³	
TD: 1.00 mil (25.4 µm)	1200 ft-lb/in ³	99.1 J/cm ³	
Secant Modulus			ASTM D882
2% Secant, MD: 1.00 mil (25.4 µm)	23500 psi	162 MPa	
2% Secant, TD: 1.00 mil (25.4 µm)	28400 psi	195 MPa	
Tensile Strength			ASTM D882
MD: Yield, 1.00 mil (25.4 µm)	1490 psi	10.3 MPa	
TD: Yield, 1.00 mil (25.4 µm)	1460 psi	10.0 MPa	
MD: Break, 1.00 mil (25.4 µm)	7300 psi	50.3 MPa	
TD: Break, 1.00 mil (25.4 µm)	5220 psi	36.0 MPa	
Tensile Elongation			ASTM D882
MD: Break, 1.00 mil (25.4 µm)	550 %	550 %	
TD: Break, 1.00 mil (25.4 µm)	650 %	650 %	
Dart Drop Impact (1.00 mil (25.4 µm))	230 g	230 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD: 1.00 mil (25.4 µm)	440 g	440 g	
TD: 1.00 mil (25.4 µm)	690 g	690 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	223 °F	106 °C	ASTM D1525
Melting Temperature (DSC)	250 °F	121 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.00 mil (25.4 µm))	70	70	ASTM D2457
Haze (1.00 mil (25.4 µm))	6.0 %	6.0 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	430 to 450 °F	221 to 232 °C	

Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 24:1 L/D
- Screw Type: Single Flight Double Mix
- Die Gap: 70 mil (1.8 mm)
- Melt Temperature: 430-450°F (221-232°C)
- Output: 10 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5:1
- Screw Speed: 82 rpm
- Frost Line Height: 22.5 in. (572 mm)

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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