



ELITE™ 5940G

Enhanced Polyethylene Resin

Overview ELITE™ 5940G Enhanced Polyethylene Resin is a copolymer produced via INSITE™ Technology from Dow.

Main Characteristics:

- MDPE with excellent balance of stiffness and toughness.
- Excellent processability.

Complies with

- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- Canadian HPFB No Objection

Consult the regulations for complete details

Additive • Antiblock: No • Slip: No • Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.940 g/cm ³	0.940 g/cm ³	ASTM D792
Base Density ¹	0.940 g/cm ³	0.940 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	0.85 g/10 min	0.85 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.0 mil	25 µm	
Film Puncture Energy	17.0 in·lb	1.92 J	
Film Puncture Force	10.0 lbf	44.5 N	
Film Puncture Resistance	115 ft·lb/in ³	9.51 J/cm ³	Dow Method
Film Toughness			ASTM D882
MD	1300 ft·lb/in ³	108 J/cm ³	
TD	1500 ft·lb/in ³	124 J/cm ³	
Secant Modulus			ASTM D882
1% Secant, MD	90700 psi	625 MPa	
2% Secant, MD	73000 psi	503 MPa	
1% Secant, TD	110000 psi	758 MPa	
2% Secant, TD	88000 psi	607 MPa	
Tensile Strength			ASTM D882
MD : Yield	3000 psi	20.7 MPa	
TD : Yield	3500 psi	24.1 MPa	
MD : Break	5200 psi	35.9 MPa	
TD : Break	4700 psi	32.4 MPa	
Tensile Elongation			ASTM D882
MD : Break	460 %	460 %	
TD : Break	640 %	640 %	
Dart Drop Impact	120 g	120 g	ASTM D1709A
Elmendorf Tear Strength ²			ASTM D1922
MD	40 g	40 g	
TD	650 g	650 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	252 °F	122 °C	ASTM D1525
Melting Temperature (DSC)	259 °F	126 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	20	20	ASTM D2457
Haze	30 %	30 %	ASTM D1003



Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 35 in.
- Screw Type: DSB II
- Die Gap: 70 mil (1.7 mm)
- Melt Temperature: 395°F
- Output: 10 lb/hr/in of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 39 rpm
- Frost Line Height: 30 in.

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 Method B

