



# Experimental XUS 61528.59

## Experimental Linear Low Density Polyethylene Resin

- Overview**
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.
  - Complies with Canadian HPFB No Objection
  - Consult the regulations for complete details.

- Additive**
- Antiblock: 3000 ppm
  - Slip: No
  - Processing Aid: Yes

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.928 g/cm <sup>3</sup>	0.928 g/cm <sup>3</sup>	ASTM D792
Base Density <sup>1</sup>	0.925 g/cm <sup>3</sup>	0.925 g/cm <sup>3</sup>	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	10.0 in·lb	1.13 J	
Film Puncture Force	7.00 lbf	31.1 N	
Film Puncture Resistance	68.0 ft·lb/in <sup>3</sup>	5.63 J/cm <sup>3</sup>	Dow Method
Film Toughness			ASTM D882
MD	1220 ft·lb/in <sup>3</sup>	101 J/cm <sup>3</sup>	
TD	1280 ft·lb/in <sup>3</sup>	106 J/cm <sup>3</sup>	
Secant Modulus			ASTM D882
1% Secant, MD	45300 psi	312 MPa	
2% Secant, MD	40700 psi	280 MPa	
1% Secant, TD	56700 psi	391 MPa	
2% Secant, TD	48200 psi	332 MPa	
Tensile Strength			ASTM D882
MD : Yield	2230 psi	15.4 MPa	
TD : Yield	2430 psi	16.7 MPa	
MD : Break	6480 psi	44.7 MPa	
TD : Break	4510 psi	31.1 MPa	
Tensile Elongation			ASTM D882
MD : Break	460 %	460 %	
TD : Break	600 %	600 %	
Dart Drop Impact	150 g	150 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD	190 g	190 g	
TD	600 g	600 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	231 °F	111 °C	ASTM D1525
Melting Temperature (DSC)	250 °F	121 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	28	28	ASTM D2457
Haze	25.0 %	25.0 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	425 °F	218 °C	



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## Extrusion Notes

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### Fabrication Conditions For Blown Film:

- Die Size: 8 in.
- Screw Type: DSB II
- Die Gap: 70 mil
- Melt Temperature: 420°F
- Output: 12 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5:1
- Screw Speed: 48 rpm
- Frost Line Height: 39 in.

## 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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<sup>1</sup> 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/cm<sup>3</sup>. Base density is the estimated density of the polymer if it did not contain any antiblock.

