



# DOW™ LLDPE DFDC-7087 NT 7

## Linear Low Density Polyethylene Resin

**Additive** • Antiblock: 6300 ppm • Slip: 1500 ppm • Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.922 g/cm <sup>3</sup>	0.922 g/cm <sup>3</sup>	ASTM D792
Base Density <sup>1</sup>	0.919 g/cm <sup>3</sup>	0.919 g/cm <sup>3</sup>	Dow Method
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 mil	25 µm	Dow Method
Film Puncture Energy	13.0 in·lb	1.47 J	Dow Method
Film Puncture Force	6.00 lbf	26.7 N	Dow Method
Film Puncture Resistance	98.0 ft·lb/in <sup>3</sup>	8.11 J/cm <sup>3</sup>	Dow Method
Film Toughness			ASTM D882
MD	1320 ft·lb/in <sup>3</sup>	109 J/cm <sup>3</sup>	
TD	1290 ft·lb/in <sup>3</sup>	107 J/cm <sup>3</sup>	
Secant Modulus			ASTM D882
1% Secant, MD	31300 psi	216 MPa	
2% Secant, MD	27600 psi	190 MPa	
1% Secant, TD	35700 psi	246 MPa	
2% Secant, TD	29900 psi	206 MPa	
Tensile Strength			ASTM D882
MD : Yield	1700 psi	11.7 MPa	
TD : Yield	1680 psi	11.6 MPa	
MD : Break	5880 psi	40.5 MPa	
TD : Break	4250 psi	29.3 MPa	
Tensile Elongation			ASTM D882
MD : Break	580 %	580 %	
TD : Break	680 %	680 %	
Dart Drop Impact	95 g	95 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD	160 g	160 g	
TD	400 g	400 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	216 °F	102 °C	ASTM D1525
Melting Temperature (DSC)	252 °F	122 °C	ISO 3146
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	17	17	ASTM D2457
Haze	38.0 %	38.0 %	ASTM D1003

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**Extrusion Notes**

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## Fabrication Conditions For Blown Film:

- Screw Size: 3.5in.; 30:1ratio L/D
- Screw Type: DSB II
- Die Gap: 70 mil (1.8 mm)
- Melt Temperature: 417°F
- Output: 12 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 39 rpm
- Frost Line Height: 52 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.

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## Additional Information

<b>North America</b>		<b>Europe/Middle East</b>	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+31-11567-2626
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
<b>Latin America</b>		<b>South Africa</b>	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	<b>Asia Pacific</b>	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

[www.dowplastics.com](http://www.dowplastics.com)

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