Technical Data Sheet

DOW™ LLDPE DFDC-7087 NT 7 Linear Low Density Polyethylene Resin

Additive

- Antiblock: 6300 ppm
- Slip: 1500 ppm
- Processing aid: No

Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method[1]
Density	0.923	g/cm³	0.923	g/cm³	ASTM D792
Base Density[2]	0.919	g/cm³	0.919	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	1.0	g/10 min	1.0	g/10 min	ASTM D1238
Films					
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/in³	8.11	J/cm³	Dow Method
Film Toughness					ASTM D882
MD	1320	ft·lb/in³	109	J/cm³	
TD	1290	ft·lb/in³	107		
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	%	

1. ASTM: American Society for Testing and Materials
2. 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.

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
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					
Vicat Softening Temperature	216	°F	102	°C	ASTM D1525
Melting Temperature (DSC)	252	°F	122	°C	ISO 3146
Optical					
Gloss (45°)	17		17		ASTM D2457
Haze	38.0	%	38.0	%	ASTM D1003
Extrusion Notes					

Fabrication Conditions for Blown Film:

- Screw Size: 3.5in.; 30:1 ratio LID
- 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