Technical Information

DOW™ LDPE 662I
Low Density Polyethylene Resin

Overview

- Designed for enhanced bubble stability
- High melt strength
- Optimum gauge range: 1.5 - 5.0 mil

Complies with:

- U.S. FDA 21 CFR 177.1520(c) 2.2
- EU, No 10/2011
- 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	0.919	g/cm³	0.919	g/cm³	ASTM D792
Base Density [1]	0.919	g/cm³	0.919	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	0.47	g/10 min	0.47	g/10 min	ASTM D1238
Films	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Film Thickness - Tested	2.0	mil	51	µm	
Film Puncture Resistance (2.0 mil (51 µm))	50.0	ft·lb/in³	4.14	J/cm³	Dow Method
Film Toughness					ASTM D882
MD : 2.0 mil (51 µm)	1540	ft·lb/in³	128	J/cm³	
TD : 2.0 mil (51 µm)	1920	ft·lb/in³	159	J/cm³	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (51 µm)	1930	psi	13.3	MPa	
TD : Yield, 2.0 mil (51 µm)	1560	psi	10.7	MPa	
MD : Break, 2.0 mil (51 µm)	3420	psi	23.6	MPa	
TD : Break, 2.0 mil (51 µm)	3490	psi	24.1	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (51 µm)	340	%	340	%	
TD : Break, 2.0 mil (51 µm)	560	%	560	%	
Dart Drop Impact (2.0 mil (51 µm))	280	g	280	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (51 µm)	130	g	130	g	
TD : 2.0 mil (51 µm)	110	g	110	g	
Thermal	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Vicat Softening Temperature	199	°F	92.8	°C	ASTM D1525
Melting Temperature (DSC)	226	°F	108	°C	Dow Method
Optical	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Gloss (45°, 2.00 mil (50.8 µm))	23		23		ASTM D2457
Haze (2.00 mil (50.8 µm))	26.0	%	26.0	%	ASTM D1003

Extrusion	Nominal Value (English)		Nominal Value (SI)	
Melt Temperature	421	°F	216	°C

Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D/Size
- Screw Type: SFDM
- Die Gap: 40 mil (1.02 mm)
- Melt Temperature: 421 °F (216 °C)
- Output: 10 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5:1
- Screw Speed: 92 rpm
- Frost Line Height: 30 in. (762 mm)

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.

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