DOWLEX™ 2106GC
Linear Low Density Polyethylene Resin

Overview

DOWLEX™ 2106GC is processable at high line speeds. Films made from DOWLEX 2106GC Polyethylene Resin exhibit excellent stretchability, tear and impact resistance, as well as exceptional optical properties.

Applications:
- Cast Stretch Wrap Film

Main Characteristics:
- Linear Low Density Polyethylene

Complies with:
- U.S. FDA FCN 424
- EU, No 10/2011

Consult the regulations for complete details

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.917	g/cm³	0.917	g/cm³	ASTM D792
Base Density [1]	0.917	g/cm³	0.917	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	3.3	g/10 min	3.3	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	1	mil	23	µm	
Tensile Strength [2]					ASTM D882
MD : Yield, 0.91 mil (23 µm), Cast Film	899	psi	6.20	MPa	
TD : Yield, 0.91 mil (23 µm), Cast Film	798	psi	5.50	MPa	
MD : Break, 0.91 mil (23 µm), Cast Film	5510	psi	38.0	MPa	
TD : Break, 0.91 mil (23 µm), Cast Film	3050	psi	21.0	MPa	
Tensile Elongation [2]					ASTM D882
MD : Break, 0.91 mil (23 µm), Cast Film	500	%	500	%	
TD : Break, 0.91 mil (23 µm), Cast Film	780	%	780	%	
Dart Drop Impact [2]					ASTM D1709A
0.91 mil (23 µm), Cast Film	140	g	140	g	
Elmendorf Tear Strength [3]					ASTM D1922
MD : 0.91 mil (23 µm), Cast Film	320	g	320	g	
TD : 0.91 mil (23 µm), Cast Film	530	g	530	g	
Film Stretch Performace - Max Elongation - Cast Film [4]					Dow Method
0.9 mil (23.0 µm)	260	%	260	%	
Film Stretch Performace - Max Stretch to Puncture - Cast Film [5]					Dow Method
0.9 mil (23.0 µm)	160	%	160	%	
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss [2] (45°, 0.906 mil (23.0 µm), Cast Film)	93		93		ASTM D2457
Haze [2] (0.906 mil (23.0 µm), Cast Film)	0.600	%	0.600	%	ASTM D1003

Extrusion	Nominal Value	(English)	Nominal Value	(SI)
Melt Temperature	428 to 536	°F	220 to 280	°C

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Extrusion Notes
Fabrication Conditions For Cast Film: • Melt Temperature: 220 - 280°C • Chill Roll Temperature: 20 - 60°C • Haul-Off Speed: 150 - 450 m/min • Recommended Gauge Range: 10 - 60 µm

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] 250 m/min; Chill roll 25°C

[3] Method B; 250 m/min; Chill roll 25°C

[4] 250 m/min; Chill roll 25°C; Measured on test stand

[5] 250 m/min; Chill roll 25°C; Measured on test stand; Max pre-stretch before sharp probe penetrates

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