Technical Information

DOWLEX™ SC 2107G
Polyethylene Resin

Overview

DOWLEX™ SC 2107G is processable at high line speeds. Films made from DOWLEX SC 2107G Polyethylene Resin exhibit excellent stretchability, outstanding tear and impact resistance, as well as exceptional optical properties.

Main Characteristics:

- Linear Low Density Polyethylene

Applications:

- Cast Stretch Wrap Film

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
Melt Index (190°C/2.16 kg)	2.3	g/10 min	2.3	g/10 min	ISO 1133
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	0.91	mil	23	µm	
Tensile Strength [1]					ASTM D882
MD : Yield, 0.91 mil (23 µm)	914	psi	6.30	MPa	
TD : Yield, 0.91 mil (23 µm)	856	psi	5.90	MPa	
MD : Break, 0.91 mil (23 µm)	6240	psi	43.0	MPa	
TD : Break, 0.91 mil (23 µm)	4060	psi	28.0	MPa	
Tensile Elongation [1]					ASTM D882
MD : Break, 0.91 mil (23 µm)	470	%	470	%	
TD : Break, 0.91 mil (23 µm)	900	%	900	%	
Dart Drop Impact [1] (0.91 mil (23 µm))	200	g	200	g	ASTM D1709A
Elmendorf Tear Strength [2]					ASTM D1922
MD : 0.91 mil (23 µm)	410	g	410	g	
TD : 0.91 mil (23 µm)	540	g	540	g	
Film Stretch Performace - Max Elongation [3]	240	%	240	%	Dow Method
Film Stretch Performace - Max Stretch to Puncture [4]	130		130		Dow Method
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss [1] (45°, 0.906 mil (23.0 µm))	92		92		ASTM D2457
Haze [1] (0.906 mil (23.0 µm))	0.70	%	0.70	%	ASTM D1003

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

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] Cast film, 250 m/min; Chill roll 25°C.

[2] Method B; Cast film, 250 m/min; Chill roll 25°C.

[3] Cast film, 250 m/min; Chill roll 25°C; Measured on test stand.

[4] Cast film, 250 m/min; Chill roll 25°C; Measured on test stand; Max pre-strech before sharp probe penetrates.