



DOWLEX™ SC 2107GS

Linear Low Density Polyethylene Resin

Overview

DOWLEX™ SC 2107GS is ultra low gel ethylene octene copolymer. Films made from DOWLEX SC 2107GS Polyethylene Resin is processable at high line speeds, exhibits excellent stretchability, outstanding tear and impact resistance, as well as exceptional optical properties.

Main Characteristics:

- Linear Low Density Polyethylene

Applications:

- Industrial film
- Hygiene & Medical 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/cm ³	0.917 g/cm ³	ASTM D792
Base Density ¹	0.917 g/cm ³	0.917 g/cm ³	Dow Method
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 ²			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 ²			ASTM D882
MD : Break, 0.91 mil (23 µm)	470 %	470 %	
TD : Break, 0.91 mil (23 µm)	900 %	900 %	
Dart Drop Impact ² (0.91 mil (23 µm))	200 g	200 g	ASTM D1709A
Elmendorf Tear Strength ³			ASTM D1922
MD : 0.91 mil (23 µm)	410 g	410 g	
TD : 0.91 mil (23 µm)	540 g	540 g	
Film Stretch Performance - Max Elongation ⁴	240 %	240 %	Dow Method
Film Stretch Performance - Max Stretch to Puncture ⁵	130	130	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss ² (45°, 0.906 mil (23.0 µm))	92	92	ASTM D2457
Haze ² (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 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 Cast film, 250 m/min; Chill roll 25°C.

³ Method B; Cast film, 250 m/min; Chill roll 25°C.

⁴ Cast film, 250 m/min; Chill roll 25°C; Measured on test stand.

⁵ Cast film, 250 m/min; Chill roll 25°C; Measured on test stand; Max pre-stretch before sharp probe penetrates.

