



DOWLEX™ GM 8480G

Linear Low Density Polyethylene Resin

Overview

DOWLEX™ GM 8480G Polyethylene Resin is suitable for cast stretch film applications with superior extensibility while maintaining good puncture and load retention.

Main Characteristics:

- Superior extensibility
- Good puncture and load retention

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)	3.0 g/10 min	3.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested ²	1 mil	20 µm	
Film Puncture Resistance	277 ft·lb/in ³	22.9 J/cm ³	Dow Method
Tensile Strength			ASTM D882
MD : Yield	1450 psi	9.97 MPa	
TD : Yield	1230 psi	8.49 MPa	
MD : Break	4680 psi	32.3 MPa	
TD : Break	2750 psi	18.9 MPa	
Tensile Elongation			ASTM D882
MD : Break	320 %	320 %	
TD : Break	360 %	360 %	
Dart Drop Impact	340 g	340 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD	210 g	210 g	
TD	360 g	360 g	
Film Stretch Performace - Max Elongation	340 %	340 %	Dow Method
Film Stretch Performace - On Pallet Puncture	12 lbf	53 N	Dow Method
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature (DSC)	250 °F	121 °C	Dow Method

Extrusion Notes

Fabrication Conditions for Cast Film:

- Machine: 5 layer cast film extrusion line
- Monolayer Film (0.8mil)
- Screw Size: 2 inch - 30:1 L/D
- Screw Size: 2.5 inch - 30:1 L/D
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- Screw Size: 2.5 inch - 30:1 L/D
- Screw Size: 2 inch - 30:1 L/D
- Die Gap: 20 mil
- Melt Temperature: 270 °C
- Output: 400 lbs/hr
- Line Speed: 600 ft/min

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

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Published: 2016-11-07

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