



Technical Data Sheet

DOWLEX™ GM 8480F Linear Low Density Polyethylene Resin

Description

DOWLEX™ GM 8480F Linear Low Density Polyethylene Resins are 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

Complies with:

- U.S. FDA FCN 741
- Canadian HPFB No Objection
- EU, No, 10/2011

Additive

- Antiblock: No
- Slip: No
- Processing aid: No

Sustainability Attribute:



Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.917	g/cm ³	0.917	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	3.0	g/10 min	3.0	g/10 min	ASTM D1238
Films					
Film Thickness - Tested	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	

1. ASTM: American Society for Testing and Materials

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

Physical Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
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	
Thermal					
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
- Screw Size: 2.5 inch - 30:1 L/D
- 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

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