



DOWLEX™ GM 8070G

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOWLEX™ GM 8070G Polyethylene Resin is suitable for a wide variety of blown film applications with good processability, superior extensibility and good physical properties.

Main Characteristics

- Superior extensibility
- High strength and good optical properties

Complies with:

- EU, No 10/2011
- U.S. FDA FCN 741
- Canadian HPFB No Objection
- Consult the regulations for complete details

General

Material Status	• Commercial: Active		
Availability	• Europe	• Latin America	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• EU No 10/2011	• FDA FCN 741	• HPFB (Canada) No Objection
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.919		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.90	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Elongation (Break)	510	%	ASTM D882
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Film Puncture Resistance	194	ft-lb/in ³	Internal Method
Secant Modulus - 2% Secant, MD	51200	psi	ASTM D882
Secant Modulus - 2% Secant, TD	46300	psi	ASTM D882
Tensile Strength - MD (Yield)	2510	psi	ASTM D882
Tensile Strength - TD (Yield)	2630	psi	ASTM D882
Tensile Strength - MD (Break)	12700	psi	ASTM D882
Tensile Elongation - MD (Break)	510	%	ASTM D882
Tensile Elongation - TD (Break)	490	%	ASTM D882
Dart Drop Impact	450	g	ASTM D1709A
Elmendorf Tear Strength - MD	320	g	ASTM D1922
Elmendorf Tear Strength - TD	490	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	217	°F	ASTM D1525
Melting Temperature (DSC)	250	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 0.800 mil)	54		ASTM D2457

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Optical	Nominal Value	Unit	Test Method
Haze (0.800 mil)	10.0	%	ASTM D1003

Processing Information

Extrusion Notes

Fabrication Conditions For Blown Film:

- Machine: Monolayer blown film extrusion line
- Monolayer Film (0.8mil)
- Screw Size: 2.5 inch (63.5 mm) 30:1 L/D
- Screw Type: DSBII
- Die Gap: 70 mil
- Output: 10 lbs/hr./in. of die circumference
- Die Diameter: 6 in.
- Blow-up Ratio: 2.5 : 1

Notes

¹ Typical properties: these are not to be construed as specifications.