



DOWLEX™ GM 8071G

The Dow Chemical Company - Experimental Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOWLEX™ GM 8071G Polyethylene Resin is designed for use in a wide variety of film applications, in special for high strength consumer trash bags/liners. This product can be used in other applications that require toughness and also offers great melt strength for high throughput rates.

Main Characteristics

- High toughness, processability and good optical properties

Complies with:

- U.S. FDA FCN 741
- Canadian HPFB No Objection
- Consult the regulations for complete details

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Antiblock: Yes • Processing Aid: Yes • Slip: Yes
Agency Ratings	• FDA FCN 741 • HPFB (Canada) No Objection
Forms	• Pellets

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.922		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.90	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Film Puncture Resistance	162	ft-lb/in ³	Internal Method
Secant Modulus - 2% Secant, MD	24900	psi	ASTM D882
Secant Modulus - 2% Secant, TD	27200	psi	ASTM D882
Tensile Strength - MD (Yield)	1360	psi	ASTM D882
Tensile Strength - TD (Yield)	1360	psi	ASTM D882
Tensile Strength - MD (Break)	4220	psi	ASTM D882
Tensile Strength - TD (Break)	3000	psi	ASTM D882
Tensile Elongation - MD (Break)	420	%	ASTM D882
Tensile Elongation - TD (Break)	500	%	ASTM D882
Dart Drop Impact	670	g	ASTM D1709A
Elmendorf Tear Strength - MD	330	g	ASTM D1922
Elmendorf Tear Strength - TD	490	g	ASTM D1922
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	223	°F	ASTM D1525
Melting Temperature (DSC)	244	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 0.800 mil)	45		ASTM D2457
Haze (0.800 mil)	16.7	%	ASTM D1003

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Processing Information

Extrusion Notes

Fabrication Conditions For Blown Film:

- Machine: Monolayer blown film extrusion line
- Monolayer Film (0.9mil)
- 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: 8 in.
- Blow-up Ratio: 2.5 : 1

Notes

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