



DOWLEX™ 5075G

The Dow Chemical Company - Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOWLEX 5075G Polyethylene Resin is a blown film extrusion linear low density polyethylene resin grade suitable for high toughness and clarity film applications..

Main Characteristics:

- Linear Low Density Polyethylene/Octene Copolymer
- For high performance film applications

Complies with:

- U.S. FDA FCN 424.

Consult the regulations for complete details.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• FDA FCN 424		
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)	1.3	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	1	mil	
Film Puncture Energy	43.9	in·lb	Internal Method
Film Puncture Force	12.8	lbf	Internal Method
Film Puncture Resistance	272	ft·lb/in ³	Internal Method
Film Toughness - MD	1140	ft·lb/in ³	ASTM D882
Film Toughness - TD	1110	ft·lb/in ³	ASTM D882
Secant Modulus			ASTM D882
1% Secant, MD	26900	psi	
2% Secant, MD	22400	psi	
Secant Modulus			ASTM D882
1% Secant, TD	31800	psi	
2% Secant, TD	26800	psi	
Tensile Strength - MD (Yield)	1610	psi	ASTM D882
Tensile Strength - TD (Yield)	1590	psi	ASTM D882
Tensile Strength - MD (Break)	6420	psi	ASTM D882
Tensile Strength - TD (Break)	5010	psi	ASTM D882
Tensile Elongation - MD (Break)	510	%	ASTM D882
Tensile Elongation - TD (Break)	590	%	ASTM D882
Dart Drop Impact	400	g	ASTM D1709A
Elmendorf Tear Strength - MD	450	g	ASTM D1922
Elmendorf Tear Strength - TD	590	g	ASTM D1922

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Thermal	Nominal Value	Unit	Test Method
Melting Temperature (DSC)	244	°F	Internal Method
Optical	Nominal Value	Unit	Test Method
Gloss (45°)	64		ASTM D2457
Haze	7.51	%	ASTM D1003

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	416	°F

Extrusion Notes

Fabrication Conditions For Blown Film:

- Die Size: 8 in.
- Screw Type: DSB II
- Die Gap: 70mil (1.8 mm)
- Melt Temperature: 416°F (223°C)
- Output: 12 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 44.3 rpm
- Frost Line Height: 45 in.

Notes

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