DOWLEX™ NG 5056G

Polyethylene Resin

The Dow Chemical Company

Message:

DOWLEX™NG 5056G polyethylene resin is a new generation of linear low density polyethylene resin, used for high-quality blown film processing, the processing requires a combination of excellent optical properties, tear strength and heat sealing, as well as very good toughness/stiffness between the balance. DOWLEX NG 5056G polyethylene resin has a very low crystal point level, making it very suitable for composite films and other special packaging. Note: When applied to the application field of contact food, DOWLEX NG 5056G polyethylene resin should comply with the U.S. Food and Drug Administration when it is unmodified and the processing process follows the requirements of good manufacturing practices. The requirements of the 177.1520 and the requirements of the food contact regulations of most European countries. Please contact your nearest Dow representative for proof of compliance with the Food Contact Act. The purchaser remains responsible for determining whether the use of its products complies with all relevant regulations.
Application field:
high transparency paper towel outer package
fresh food bag
food packaging film
composite film

General Information			
Agency Ratings	FDA 21 CFR 177.1520		
Forms	Particle		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity [1]	0.919	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) [2] (190°C/2.16 kg)	1.1	g/10 min	ISO 1133
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	50	µm	
Film Puncture Energy [3] (50 µm)	3.50	J	ASTM D5748
Film Puncture Force [4] (50 µm)	54.0	N	ASTM D5748
Tensile Modulus [5]			ISO 527-3
2% secant, MD: 50 µm	198	MPa	ISO 527-3
2% secant, TD: 50 µm	238	MPa	ISO 527-3
Tensile Stress [6]			ISO 527-3
MD: Yield, 50 µm	7.50	MPa	ISO 527-3
TD: Yield, 50 µm	8.00	MPa	ISO 527-3
MD: Break, 50 µm	38.0	MPa	ISO 527-3
TD: Break, 50 µm	37.0	MPa	ISO 527-3
Tensile Elongation [7]			ISO 527-3
MD: Break, 50 µm	810	%	ISO 527-3
TD: Break, 50 µm	920	%	ISO 527-3
Dart Drop Impact [8] (50 µm)	450	g	ISO 7765-1/A
Elmendorf Tear Strength [9]			ASTM D1922
MD : 50 µm	890	g	ASTM D1922
TD : 50 µm	1100	g	ASTM D1922

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature [10]	104	°C	ASTM D1525
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss [11] (45°, 50.0 µm)	61		ASTM D2457
Haze [12] (50.0 µm)	8.9	%	ISO 14782
Extrusion	**Nominal Value**	**Unit**	
Melt Temperature	190 - 240	°C	

Extrusion instructions
管形薄膜挤出的制造条件: 熔体温度:190 至 240°C. 放大比范围:1.5 至 3:1. 建议的厚度范围:10 至 150 µm.

NOTE	
1.	Compression molding
2.	Compression molding
3.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
4.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
5.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
6.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
7.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
8.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
9.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
10.	Compression molding
11.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.
12.	Blow molded film extruded at 235°C, 50 microns, 2.5 BUR, 1.55mm die gap.

Recommended distributors for this material

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