ELITE™ 5401GS

Enhanced Polyethylene Resin

The Dow Chemical Company

Message:

5401ELITE™5401GS reinforced polyethylene resin is made of Dow INSITE™The copolymer produced by technology has excellent impact resistance, excellent tear resistance, tensile resistance and optical properties, and can be used to manufacture high-strength blown films. In addition, ELITE™5401GS reinforced polyethylene resin also integrates unique properties such as low initial sealing temperature and high modulus, as well as less blocking, and can be used for automatic packaging. ELITE™5401GS reinforced polyethylene resin contains anti-skid and anti-blocking additives.
Purpose:
Food and special packaging films.
thinned film with very high toughness.
Compliance:
EU No 10/2011 Regulation
FDA FCN 424
View regulations for complete information

General Information	
Additive	Anti-caking agent (2500 ppm) Sliding agent (1000 ppm)
Agency Ratings	FDA FCN 424 Europe No 10/2011
Forms	Particle
Processing Method	Film extrusion Blow film

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.917	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ISO 1133
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	51	µm	
Film Puncture Energy [1] (51 µm)	6.00	J	ASTM D5748
Film Puncture Force [2] (51 µm)	80.0	N	ASTM D5748
Tensile Modulus [3]			ISO 527-3
2% secant, MD: 51 µm	181	MPa	ISO 527-3
2% secant, TD: 51 µm	204	MPa	ISO 527-3
Tensile Stress [4]			ISO 527-3
MD: Yield, 51 µm	8.00	MPa	ISO 527-3
TD: Yield, 51 µm	9.00	MPa	ISO 527-3
MD: Fracture, 51 µm	38.0	MPa	ISO 527-3
TD: Fracture, 51 µm	37.0	MPa	ISO 527-3
Tensile Elongation [5]			ISO 527-3

MD: Fracture, 51 µm	570	%	ISO 527-3
TD: Fracture, 51 µm	610	%	ISO 527-3
Dart Drop Impact [6] (51 µm)	> 850	g	ISO 7765-1/B
Elmendorf Tear Strength [7]			ASTM D1922
MD : 51 µm	780	g	ASTM D1922
TD : 51 µm	980	g	ASTM D1922
Seal Initiation Temperature [8] (51 µm)	95.0	°C	Internal method
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	100	°C	ASTM D1525
Melting Temperature	123	°C	DSC
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss [9] (45°, 51.0 µm)	64		ASTM D2457
Haze [10] (51.0 µm)	13	%	ISO 14782
Extrusion	**Nominal Value**	**Unit**	
Melt Temperature	190 - 250	°C	
Extrusion instructions			
吹塑薄膜挤出的制造条件: 模具间隙:0.8-2.8 mm. 熔体温度:190-250 °C. 放大比:1.5 比 3.5.			
NOTE			
1.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
2.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
3.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
4.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
5.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
6.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
7.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
8.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap. Achieve a temperature of 5.25 N/15mm heat sealing strength.		
9.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		
10.	Blown film extruded at 232°C, 2.5:1 BUR, 1.8mm mold gap.		

Recommended distributors for this material

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