

# ELITE™ NG 5401B

Enhanced Polyethylene Resin

The Dow Chemical Company

## Message:

ELITE™ NG 5401B is a Linear Low Density Polyethylene, 1-Octene copolymer, produced with the SOLUTION™ technology. This resin presents excellent tensile, tear and puncture resistance even at low temperatures with great gloss and clarity. It has a low seal initiation temperature with high seal performance allowing an increase in the speed line of form, fill and seal.

### Main Characteristics

Film for form, fill and seal

Film for packaging for frozen food

Excellent mechanical properties even at low temperatures

Low seal initiation temperature and high seal properties

Excellent optics

Complies with:

US FDA FCN 424

Europe Commission Regulation (EU) No 10/2011

Suitable for food contact Report # 823/05 issued by INAL according to MERCOSUR

Consult the regulations for complete details.

General Information			
Agency Ratings		FDA FCN 424	
		Europe No 10/2011	
Forms		Particle	
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.918	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	38	µm	Internal method
Film Puncture Resistance	9.02	J/cm³	Internal method
secant modulus			ASTM D882
2% secant, MD	132	MPa	ASTM D882
2% secant, TD	136	MPa	ASTM D882
Tensile Strength			ASTM D882
MD: Yield	10.0	MPa	ASTM D882
TD: Yield	10.0	MPa	ASTM D882
MD: Fracture	38.0	MPa	ASTM D882
TD: Fracture	30.0	MPa	ASTM D882
Tensile Elongation			ASTM D882
MD: Fracture	720	%	ASTM D882
TD: Fracture	800	%	ASTM D882
Dart Drop Impact	1000	g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD	680	g	ASTM D1922

TD	890	g	ASTM D1922
Optical	Nominal Value	Unit	Test Method
Gloss (45°)	62		ASTM D2457
Haze	11	%	ASTM D1003
Extrusion instructions			

Fabrication Conditions for Blown Film:  
 Screw Diameter: 63.5 mm (2.5 in); 24.5 L/D  
 Type of Screw:  
 Die Gap: 1.8 mm (70 mil)  
 Melt Temperature: 232°C (450°F)  
 Output: 52 kg/h (113 lb/h)  
 Die Diameter: 152 mm (6 in)  
 Blow-up Ratio: 2.5:1  
 Screw Speed: 83 rpm  
 Frost Line Height: 635 mm (25 in)

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### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

