



# ELITE™ NG 5401B

## Enhanced Polyethylene Resin

### Overview

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.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm <sup>3</sup>	0.918 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	1.0 g/10 min	1.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1.5 mil	38 µm	Dow Method
Film Puncture Resistance	109 ft-lb/in <sup>3</sup>	9.02 J/cm <sup>3</sup>	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD	19100 psi	132 MPa	
2% Secant, TD	19700 psi	136 MPa	
Tensile Strength			ASTM D882
MD : Yield	1450 psi	10.0 MPa	
TD : Yield	1450 psi	10.0 MPa	
MD : Break	5510 psi	38.0 MPa	
TD : Break	4350 psi	30.0 MPa	
Tensile Elongation			ASTM D882
MD : Break	720 %	720 %	
TD : Break	800 %	800 %	
Dart Drop Impact	1000 g	1000 g	ASTM D1709
Elmendorf Tear Strength			ASTM D1922
MD	680 g	680 g	
TD	890 g	890 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	62	62	ASTM D2457
Haze	11 %	11 %	ASTM D1003

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**Extrusion Notes**

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## 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)

**Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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<b>North America</b>		<b>Europe/Middle East</b>	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+31-11567-2626
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
<b>Latin America</b>		<b>South Africa</b>	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	<b>Asia Pacific</b>	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

[www.dowplastics.com](http://www.dowplastics.com)

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