



## Technical Data Sheet

### DOWLEX™ SL 2103G Polyethylene Resin

#### Description

DOWLEX™ SL 2103G Polyethylene Resin is a next generation LLDPE resin designed for high performance blown film applications requiring a combination of excellent optical properties, very high toughness and tear resistance, and very good heat seal and hot tack strength. The resin also offers good bubble stability allowing for film production at high outputs.

#### Applications

- Silage stretch films
- Stretch cling films
- Lamination films
- Industrial and consumer films

#### Complies with

- EU, No 10/2011
- U.S. FDA FCN 424

Consult the regulations for complete details.

#### Additive

- Antiblock: No
- Processing aid: No
- Slip: No

#### Properties<sup>1</sup>

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method <sup>2</sup>
Density	0.917	g/cm <sup>3</sup>	0.917	g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	0.70	g/10 min	0.70	g/10 min	ISO 1133
<b>Films</b>					
Film Thickness - Tested	2.0	mil	50	µm	
Tensile Stress <sup>3</sup>					ISO 527-3
MD: Yield, 2.0 mil (50.0 µm)	972	psi	6.70	MPa	
TD: Yield, 2.0 mil (50.0 µm)	928	psi	6.40	MPa	
MD: Break, 2.0 mil (50.0 µm)	6090	psi	42.0	MPa	
TD: Break, 2.0 mil (50.0 µm)	5220	psi	36.0	MPa	
Tensile Elongation <sup>3</sup>					ISO 527-3
MD: Break, 2.0 mil (50.0 µm)	670	%	670	%	
TD: Break, 2.0 mil (50.0 µm)	560	%	560	%	
Dart Drop Impact <sup>3</sup> (2.0 mil (50.0 µm))	610	g	610	g	ISO 7765-1/A

1. Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.
2. ASTM: American Society for Testing and Materials  
ISO: International Standardization Organization
3. Blown Film produced at 235°C, 2.5 BUR, 1.5 mm die gap

## Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Elmendorf Tear Strength <sup>3</sup>					ASTM D1922
MD: 2.0 mil (50.0 µm)	930	g	930	g	
TD: 2.0 mil (50.0 µm)	1100	g	1100	g	
<b>Thermal</b>					
Vicat Softening Temperature <sup>4</sup>	205	°F	96.0	°C	ASTM D1525
<b>Optical</b>					
Gloss <sup>3</sup> (45°C, 1.97 mil (50.0 µm))	62		62		ASTM D2457
Clarity <sup>3</sup> (1.97 mil (50.0 µm))	99.0		99.0		ASTM D1746
Haze <sup>3</sup> (1.97 mil (50.0 µm))	9.50	%	9.50	%	ISO 14782
<b>Extrusion</b>					
Melt Temperature	374 to 464	°F	190 to 240	°C	
<b>Extrusion Notes</b>					
Fabrication Conditions for Blown Film Resin:					
<ul style="list-style-type: none"> <li>Melt Temperature: 190 to 240°C</li> <li>Blow-up Ratio: 1.5 to 3:1</li> <li>Recommended Gauge Range: 10 to 150 µm</li> </ul>					

4. Compression Molded.

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