

## Technical Information

# DOW™ LDPE 132I Low Density Polyethylene Resin



### Overview

- A barefoot resin for heavy duty film applications
- Optimum gauge range: 2.0-6.0 mil
- Used in shrink film, shipping sacks, construction film and other gauge film applications
- Complies with U.S. FDA 21 CFR 177.1520 (c) 2.2.
- Complies with Canadian HPFB No Objection (With Limitations)
- Complies with EU, No 10/2011
- Complies with U.S. FDA-DMF
- Consult the regulations for complete details.

### Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.921 g/cm <sup>3</sup>	0.921 g/cm <sup>3</sup>	ASTM D792
Base Density <sup>1</sup>	0.921 g/cm <sup>3</sup>	0.921 g/cm <sup>3</sup>	Dow Method
Melt Index (190°C/2.16 kg)	0.25 g/10 min	0.25 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	51 µm	
Film Puncture Resistance (2.0 mil (51 µm))	69.0 ft·lb/in <sup>3</sup>	5.71 J/cm <sup>3</sup>	Dow Method
Film Toughness			ASTM D882
MD : 2.0 mil (51 µm)	2610 ft·lb/in <sup>3</sup>	216 J/cm <sup>3</sup>	
TD : 2.0 mil (51 µm)	2560 ft·lb/in <sup>3</sup>	211 J/cm <sup>3</sup>	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (51 µm)	1750 psi	12.1 MPa	
TD : Yield, 2.0 mil (51 µm)	1750 psi	12.1 MPa	
MD : Break, 2.0 mil (51 µm)	4610 psi	31.8 MPa	
TD : Break, 2.0 mil (51 µm)	4190 psi	28.9 MPa	
Tensile Elongation			ASTM D882
MD : Break, 2.0 mil (51 µm)	470 %	470 %	
TD : Break, 2.0 mil (51 µm)	660 %	660 %	
Dart Drop Impact (2.0 mil (51 µm))	190 g	190 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (51 µm)	300 g	300 g	
TD : 2.0 mil (51 µm)	180 g	180 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	205 °F	96.1 °C	ASTM D1525
Melting Temperature (DSC)	230 °F	110 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 2.00 mil (50.8 µm))	50	50	ASTM D2457
Haze (2.00 mil (50.8 µm))	11.3 %	11.3 %	ASTM D1003

### Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 30:1 L/D
- Screw Type: Single Flight Double Mix
- Die Gap: 40 mil (1.02 mm)
- Melt Temperature: 420°F (215°C)
- Output: 8 lb/hr/in. of die circumference
- Die Diameter: 6 in.
- Blow-Up Ratio: 2.5:1

