



# DOWLEX™ NG 2045B

## Polyethylene Resin

### Overview

DOWLEX™ NG 2045B is a Linear Low Density Polyethylene resin, octene copolymer, produced via the Solution process. This resin exhibits excellent thermal stability at a wide range of processing conditions. Films made with this resin present a combination of excellent puncture, impact and tear resistance.

Main Characteristics:

- Films for heavy duty applications like industrial bags and general use bags
- Films for agricultural applications
- Coextruded films

Complies with:

- FDA 21 CFR 177.1520(c)3.2a
- EU, No 10/2011
- Canadian HPFB No Objection

### Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.920 g/cm <sup>3</sup>	0.920 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	
Film Puncture Resistance (1.5 mil (38 µm))	132 ft·lb/in <sup>3</sup>	10.9 J/cm <sup>3</sup>	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD : 1.5 mil (38 µm)	28300 psi	195 MPa	
2% Secant, TD : 1.5 mil (38 µm)	32700 psi	226 MPa	
Tensile Strength			ASTM D882
MD : Yield, 1.5 mil (38 µm)	1590 psi	11.0 MPa	
TD : Yield, 1.5 mil (38 µm)	1590 psi	11.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 1.5 mil (38 µm)	840 %	840 %	
TD : Break, 1.5 mil (38 µm)	1100 %	1100 %	
Dart Drop Impact (1.5 mil (38 µm))	250 g	250 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 1.5 mil (38 µm)	590 g	590 g	
TD : 1.5 mil (38 µm)	880 g	880 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.48 mil (37.5 µm))	61	61	ASTM D2457
Haze (1.48 mil (37.5 µm))	11 %	11 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	423 °F	217 °C	

### Notes

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

