



DOWLEX™ 2107B

Polyethylene Resin

Overview

DOWLEX™ 2107B Polyethylene Resin with Extra Stretch Performance is an Ethylene-1-Octene copolymer designed for cast film applications, such as industrial pallet wrap. DOWLEX 2107B provides stretch film with superior extensibility and increased resistance to failure around film flaws while maintaining exceptional puncture resistance and load retention.

Main Characteristics:

- Industrial stretch film
- Film for products for adult incontinence
- Film for products for femine hygiene

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- EU, No 10/2011

Consult the regulations for complete details.

Suitable for food contact, Report # 927/09 issued by INAL according to MERCOSUR.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	2.6 g/10 min	2.6 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Puncture Resistance (0.87 mil (22 µm))	1900 ft·lb/in ³	157 J/cm ³	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD : 0.87 mil (22 µm)	27400 psi	189 MPa	
2% Secant, TD : 0.87 mil (22 µm)	28400 psi	196 MPa	
Tensile Strength			ASTM D882
MD : Yield, 0.87 mil (22 µm)	1580 psi	10.9 MPa	
TD : Yield, 0.87 mil (22 µm)	1570 psi	10.8 MPa	
MD : Break, 0.87 mil (22 µm)	4400 psi	30.3 MPa	
TD : Break, 0.87 mil (22 µm)	4130 psi	28.5 MPa	
Tensile Elongation			ASTM D882
MD : Break	590 %	590 %	
TD : Break	870 %	870 %	
Dart Drop Impact (0.87 mil (22 µm))	100 g	100 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 0.87 mil (22 µm)	160 g	160 g	
TD : 0.87 mil (22 µm)	710 g	710 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 0.866 mil (22.0 µm))	78	78	ASTM D2457
Haze (0.866 mil (22.0 µm))	5.2 %	5.2 %	ASTM D1003

Additional Information

Recommended Processing Conditions for extrusion Cast for 22 um film:

- Melt temperature: 220 - 280C
- Chill roll temperature: 15 - 60C
- Line speed: 150 - 600 m/min
- Thickness: 10 - 60 microns

