



DOWLEX™ NG 5066G

Polyethylene Resin

Overview

DOWLEX™ NG 5066G Polyethylene Resin is an ethylene octene-1 copolymer suitable for the production of blown film requiring good tear strength and outstanding toughness with good stiffness and temperature resistance. Typical application of use include lamination film.

Applications:

- High clarity tissue overwrap
- Produce bags
- Food packaging films
- Lamination film

Complies with:

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

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.934 g/cm ³	0.934 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	1.7 g/10 min	1.7 g/10 min	ISO 1133
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2 mil	50 µm	
Tensile Modulus			ISO 527-3
2% Secant, MD : 2.0 mil (50 µm)	60900 psi	420 MPa	
2% Secant, TD : 2.0 mil (50 µm)	68200 psi	470 MPa	
Tensile Stress			ISO 527-3
MD : Yield, 2.0 mil (50 µm)	2030 psi	14.0 MPa	
TD : Yield, 2.0 mil (50 µm)	2470 psi	17.0 MPa	
MD : Break, 2.0 mil (50 µm)	3050 psi	21.0 MPa	
TD : Break, 2.0 mil (50 µm)	3340 psi	23.0 MPa	
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil (50 µm)	590 %	590 %	
TD : Break, 2.0 mil (50 µm)	620 %	620 %	
Dart Drop Impact (2.0 mil (50 µm))	110 g	110 g	ISO 7765-1/A
Elmendorf Tear Strength			ASTM D1922
MD : 2.0 mil (50 µm)	130 g	130 g	
TD : 2.0 mil (50 µm)	230 g	230 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	255 °F	124 °C	ASTM D1525
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	374 to 464 °F	190 to 240 °C	

Extrusion Notes

Fabrication Conditions:

- Die Gap 2.5 mm
- Melt Temperature: 190 to 240°C
- Blow-Up Ratio: 1.5 to 3:1
- Recommended Gauge Range: 10 to 150 µm

