



DOWLEX™ 6001GC

Polyethylene Resin

Overview

DOWLEX™ 6001GC Polyethylene Resin is an ethylene, 1-octene copolymer, suitable for high performance blown film applications alone or in blends with LDPE. It offers superior seal performance at high extrusion output rates and an excellent balance of optical and mechanical properties.

Main Characteristics:

- Optimum extruder output and stability, pure or in blends.
- Combination of sealability with optical and mechanical properties

Applications:

- Lamination Films for Food and Specialty Packaging
- Frozen Food Packaging
- Fresh Food Packaging

Complies with:

- Europe Commission Regulation (EU) No 10/2011EU
- U.S. FDA FCN 424

Consult the regulations for complete details

Additive

- Antiblock: 2500 ppm
- Slip: 900 ppm
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.917 g/cm ³	0.917 g/cm ³	ASTM D792
Base Density ¹	0.916 g/cm ³	0.916 g/cm ³	Dow Method
Melt Index (190°C/2.1 kg)	0.70 g/10 min	0.70 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	50 µm	
Tensile Modulus			ISO 527-3
2% Secant, MD : 2.0 mil (50 µm)	15200 psi	105 MPa	
2% Secant, TD : 2.0 mil (50 µm)	16000 psi	110 MPa	
Tensile Stress			ISO 527-3
MD : Yield, 2.0 mil (50 µm)	754 psi	5.20 MPa	
TD : Yield, 2.0 mil (50 µm)	1160 psi	8.00 MPa	
MD : Break, 2.0 mil (50 µm)	5640 psi	38.9 MPa	
TD : Break, 2.0 mil (50 µm)	5030 psi	34.7 MPa	
Tensile Elongation			ISO 527-3
MD : Break, 2.0 mil (50 µm)	610 %	610 %	
TD : Break, 2.0 mil (50 µm)	630 %	630 %	
Dart Drop Impact (2.0 mil (50 µm))	1100 g	1100 g	ISO 7765-1/A
Elmendorf Tear Strength ²			ASTM D1922
MD : 2.0 mil (50 µm)	830 g	830 g	
TD : 2.0 mil (50 µm)	1100 g	1100 g	
Seal Initiation Temperature			Dow Method
2.0 mil (50 µm)	205 °F	96.0 °C	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.97 mil (50.0 µm))	66	66	ASTM D2457
Haze (1.97 mil (50.0 µm))	9.0 %	9.0 %	ASTM D1003



Extrusion Notes

Fabrication Conditions For Blown Film Extrusion:

- Melt Temperature: 220°C
- Die Diameter: 150 mm
- Die Gap: 1.5 mm
- Blow-Up Ratio: 2.5
- Film Thickness: 50 µm.

Notes

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

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

² Method B

