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/cm³	0.917	g/cm³	ASTM D792
Base Density [1]	0.916	g/cm³	0.916	g/cm³	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	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))	9.00	%	9.00	%	ASTM D1003

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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

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