



DOWLEX™ 5057GC

Linear Low Density Polyethylene Resin

Overview DOWLEX™ 5057GC is an ethylene and 1-octene copolymer, suitable for 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 processability, pure or in blends
- Combination of sealability and optical and mechanical properties

Complies with:

- U.S. FDA FCN 424
- EU, No 10/2011
- Consult the regulations for complete details.

Additive • Antiblock: No • Slip: No • Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.916 g/cm ³	0.916 g/cm ³	ASTM D792
Base Density ¹	0.916 g/cm ³	0.916 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	50 µm	
Dart Drop Impact (2.0 mil (50 µm))	450 g	450 g	ASTM D1709A
Elmendorf Tear Strength ²			ASTM D1922
MD : 2.0 mil (50 µm)	1100 g	1100 g	
TD : 2.0 mil (50 µm)	1100 g	1100 g	
Seal Initiation Temperature	208 °F	98.0 °C	Dow Method
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature (DSC)	253 °F	123 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.97 mil (50.0 µm))	65	65	ASTM D2457
Haze (1.97 mil (50.0 µm))	11 %	11 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	428 °F	220 °C	

Extrusion Notes

Blown film extrusion conditions:

- Melt Temperature: 220°C
- Die diameter: 150 mm
- Die gap: 1.5 mm
- Blow-up ratio: 2.5
- Film thickness: 50 microns

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

