



DOWLEX™ 2036.01G

Linear Low Density Polyethylene Resin

Overview

DOWLEX™ 2036.01G Linear Low Density Polyethylene Resin is suitable for the production of cast films with high stiffness, good tear strength and outstanding toughness. It can be used in skin layers of coextruded cast films made from DOWLEX resins to provide a surface with good slip properties.

Complies with:

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

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.933 g/cm ³	0.933 g/cm ³	ASTM D792
Base Density ¹	0.935 g/cm ³	0.935 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	2.5 g/10 min	2.5 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Puncture Resistance	125 ft·lb/in ³	10.3 J/cm ³	Dow Method
Film Toughness			ASTM D882
MD	3910 ft·lb/in ³	324 J/cm ³	
TD	3720 ft·lb/in ³	308 J/cm ³	
Tensile Strength			ASTM D882
MD : Yield	2450 psi	16.9 MPa	
TD : Yield	2550 psi	17.6 MPa	
MD : Break	8590 psi	59.2 MPa	
TD : Break	5790 psi	39.9 MPa	
Tensile Elongation			ASTM D882
MD : Break	620 %	620 %	
TD : Break	750 %	750 %	
Dart Drop Impact	57 g	57 g	ASTM D1709A
Elmendorf Tear Strength ²			ASTM D1922
MD	83 g	83 g	
TD	290 g	290 g	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	246 °F	119 °C	ASTM D1525
Melting Temperature (DSC)	257 °F	125 °C	Dow Method
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°)	90	90	ASTM D2457
Haze	2.60 %	2.60 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	525 °F	274 °C	

Extrusion Notes

Fabrication Conditions For Cast Film:

- EGAN/Davis-Standard 5 layer cast line
- Melt Temperature: 525°F (274°C)
- Chill Roll (primary/secondary) Temperature: 70°F (21°C)
- Line Speed: 600 fpm (183m/min)
- Die Width: 24in. (520mm)
- Die Gap: 25mil (0.6mm)

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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Published: 2013-09-30

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