



DOW™ LDPE 4010

Low Density Polyethylene Resin

Overview Dow Polyethylene LDPE 4010 is a general purpose Extrusion Coating Resin.

It complies with:

- European Commission Regulation (EU) No 10/2011.

Consult regulations for complete details.

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D792
Base Density ¹	0.918 g/cm ³	0.918 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	10 g/10 min	10 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress			ISO 527-2
Yield	1160 psi	8.00 MPa	
--	1740 psi	12.0 MPa	
Tensile Strain (Break)	500 %	500 %	ISO 527-2
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	192 °F	89.0 °C	ASTM D1525
Melting Temperature (DSC)	221 °F	105 °C	Dow Method

Additional Information

Selection note:

- WVTR: Lyssy or Mocon
- Chill roll: matte or glossy
- Air gap: 250mm or 200mm
- Nip Off-set : -15mm or 0mm
- Tset: 260, 290 or 320°C

Substrate:

- Paper type (e.g. Kraft Paper) or Film type (OPP) - weight in g/m² or thickness in micron

Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Draw Down ² (554°F (290°C))	740 ft/min	230 m/min	Dow Method
Minimum Coating Weight - Calculated ³ (554°F (290°C))	4.3 lb/ream	7.0 g/m ²	Dow Method
Neck-in ⁴ (554°F (290°C))	3.9 in	100.0 mm	Dow Method

Extrusion Notes

Fabrication Conditions for Extrusion Coatings:

- Laminator settings applied for extrusion processing:
 - Air-gap = 250 mm
 - Nip-off set = -15 mm
 - Chill Roll glossy

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 Acceleration from 15g/m² coating at selected set extruder temperature

³ Acceleration from 15g/m² coating at selected set extruder temperature

⁴ 25g/m² coatings at selected running conditions

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