

DOW™ LDPE 4010

The Dow Chemical Company - Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

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.

General					
Material Status	Commercial: Active				
Availability	North America				
Additive	Antiblock: No	 Processing Aid: No 	Slip: No		
Agency Ratings	• EU 10/2011				
Forms	• Pellets				
Processing Method	Extrusion Coating				

ASTM & ISO Properties ¹					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity	0.920		ASTM D792		
Melt Mass-Flow Rate (190°C/2.16 kg)	10	g/10 min	ASTM D1238		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Stress (Yield)	1160	psi	ISO 527-2		
Tensile Stress	1740	psi	ISO 527-2		
Tensile Strain (Break)	500	%	ISO 527-2		
Thermal	Nominal Value	Unit	Test Method		
Vicat Softening Temperature	192	°F	ASTM D1525		
Melting Temperature (DSC)	221	°F	Internal 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:

 $\bullet \ \ \text{Paper type (e.g. Kraft Paper) or Film type (OPP) - weight in } \ g/m^2 \ \text{or thickness in micron}$

Processing Information						
Extrusion	Nominal Value Unit	Test Method				
Draw Down ² (554°F)	740 ft/min	Internal Method				
Minimum Coating Weight - Calculated ³ (554°F)	4.3 lb/ream	Internal Method				
Neck-in ⁴ (554°F)	3.9 in	Internal Method				



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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

- ¹ Typical properties: these are not to be construed as specifications.
- 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

