DOW LDPE 312E

Low Density Polyethylene Resin

DOW LDPE 312E is a fractional melt index low density polyethylene resin, containing slip and antiblock additives.
DOW LDPE 312E has been specially designed for superior processability on blown film lines leading to significant output improvements.
The resin offers additionally excellent draw down. It can be used pure or in blends with LLDPE resins.

Applications:
Health & hygiene films, Food packaging, Collation shrink, Agricultural films, Shopping bags, Garbage bags, Lamination films

Main Characteristics

- Excellent processability and draw down
- Good physical properties in blends with LLDPE
- Can be readily extruded using conventional blown film techniques at melt temperatures between 160 and 195 ºC
- DOW LDPE 312E should compliy with
  U.S. FDA 21 CFR 177.1520 (c)2.2
  Europe EU-Directive 2002/72/EC

Consult the regulations for complete details.

Slip Additive:	385 ppm
Antiblock Additive:	900 ppm

Properties(1)		English	S.I.
Typical Physical		Test Method	
Melt Index, (I_2) at 190°C/2.16 kg, g/10 min		ASTM D 1238	0.75
Density, g/cm^3		ASTM D 792	0.923
Film, (50 µm)			
Puncture Resistance, J/cm^3		Dow Method	4
Energy, in• J			1.8
Force N			50
Dart Impact, g Method A		ASTM D 1709	170
Elmendorf Tear (Method B), g	MD	ASTM D 1922	350
	CD		260
Tensile Yield, MPa	MD	ASTM D 882	11
	CD		11
Ultimate Tensile, MPa	MD	ASTM D 882	25
	CD		23
Ultimate Elongation, %	MD	ASTM D 882	390
	CD		570
Tensile Modulus, 2% Secant, MPa	MD	ASTM D 882	175
	CD		185
Gloss, 45°		ASTM D 2457	58
Haze, %		ASTM D 1003	9.2
COF		ASTM D-1894	0.15

Fabrication Conditions For Blown Film:

- Screw Type: Universal
- Output: 25 kg/hr
- Die Diameter: 150 mm.
- Blow-Up Ratio: 2.5
- Screw Speed: 77 rpm

(1) These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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