# DOW™ LDPE 310E

## Low Density Polyethylene Resin

## The Dow Chemical Company

## Message:

DOW LDPE 310E is a fractional melt index low density polyethylene resin. DOW LDPE 310E 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:

lamination film, shrink film, and stretch film

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°C

Complies with:

U.S. FDA 21 CFR 177.1520 ( c )2.2

EU, No 10/2011

U.S. FDA-DMF

Canadian HPFB No Objection

Consult the regulations for complete details.

Slip Additive: 0 ppm Antiblock Additive: 0 ppm

General Information	
Agency Ratings	DMF not rated
	FDA 21 CFR 177.1520(c) 2.2
	HPFB (Canada) No Objection
	Europe No 10/2011

Forms	Particle		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.923	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16			
kg)	0.75	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Coefficient of Friction	0.50 - 0.70		ASTM D1894
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	50	μm	
Film Puncture Energy (50 μm)	1.80	J	Internal method
Film Puncture Force (50 μm)	50.0	N	Internal method
Film Puncture Resistance (50 µm)	4.00	J/cm³	Internal method
secant modulus			ASTM D882
2% secant, MD: 50 μm, blown film	175	MPa	ASTM D882
2% secant, TD: 50 μm, blown film	185	MPa	ASTM D882
Tensile Strength			ASTM D882
MD: Yield, 50 μm, blown film	11.0	MPa	ASTM D882
TD: Yield, 50 µm, blown film	11.0	MPa	ASTM D882

MD: Broken, 50 μm, blown film	25.0	MPa	ASTM D882
TD: Broken, 50 µm, blown film	23.0	MPa	ASTM D882
Tensile Elongation			ASTM D882
MD: Broken, 50 μm, blown film	390	%	ASTM D882
TD: Broken, 50 µm, blown film	570	%	ASTM D882
Dart Drop Impact (50 μm, Blown Film)	170	g	ASTM D1709A
Elmendorf Tear Strength <sup>1</sup>			ASTM D1922
MD: 50 μm, blown film	350	g	ASTM D1922
TD: 50 µm, blown film	260	g	ASTM D1922
Optical	Nominal Value	Unit	Test Method
Gloss (45°, 50.0 μm, Blown Film)	58		ASTM D2457
Haze (50.0 μm, Blown Film)	9.2	%	ASTM D1003
Extrusion	Nominal Value	Unit	
Melt Temperature	160 - 195	°C	
Extrusion instructions			

#### Extrusion instructions

吹塑薄膜的制造条件:

螺杆类型:通用

输出:25 kg/h

模具直径:150 mm.

放大比:2.5

螺杆速度:77 rpm

### NOTE

1. Method B

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

## Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

