DOW™ LDPE 582E
Low Density Polyethylene Resin

Overview

DOW LDPETM 582E Polyethylene Resin can be readily extruded using conventional blown film techniques utilising melt temperatures between 150 and 170°C. DOW LDPE 582E Polyethylene Resin, when properly fabricated, shows good mechanical properties and high optical properties. It shows very good drawdown properties and excellent processability. This product contains slip and antiblock additives.

Regulations:
DOW LDPE 582E Polyethylene Resin should comply with:

- U.S. FDA 21 CFR 177.1520(c) 2.2
- EU, No 10/2011
- U.S. FDA-DMF
- Consult the regulations for complete details.

Applications:

- Light produce bags.
- Soft goods packaging.
- Textile packaging.
- High clarity applications.

Additive

- Antiblock
- Slip

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.923	g/cm³	0.923	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	3.5	g/10 min	3.5	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Coefficient of Friction	0.16 to 0.20		0.16 to 0.20		ASTM D1894
Films	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Film Thickness - Tested	2	mil	50	µm	
Secant Modulus					ASTM D882
2% Secant, MD : 2.0 mil (50 µm)	27600	psi	190	MPa	
2% Secant, TD : 2.0 mil (50 µm)	25400	psi	175	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (50 µm)	1310	psi	9.00	MPa	
TD : Yield, 2.0 mil (50 µm)	1310	psi	9.00	MPa	
MD : Break, 2.0 mil (50 µm)	2470	psi	17.0	MPa	
TD : Break, 2.0 mil (50 µm)	2180	psi	15.0	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (50 µm)	450	%	450	%	
TD : Break, 2.0 mil (50 µm)	650	%	650	%	
Dart Drop Impact (2.0 mil (50 µm))	120	g	120	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (50 µm)	500	g	500	g	
TD : 2.0 mil (50 µm)	400	g	400	g	
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Vicat Softening Temperature	199	°F	93.0	°C	ISO 306/A
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss (20°, 1.97 mil (50.0 µm))	70		70		ASTM D2457
Haze (1.97 mil (50.0 µm))	7.00	%	7.00	%	ASTM D1003

Extrusion	Nominal Value	(English)	Nominal Value	(SI)
Melt Temperature	302 to 338	°F	150 to 170	°C

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Extrusion Notes
Blow-Up ratio 1:2.5

Notes

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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