DOW™ LDPE 582E

Low Density Polyethylene Resin

The Dow Chemical Company

IDES | Prospector

Product Description

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
- Consult the regulations for complete details.

Applications:

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

General

Material Status	• Commercial: Active	
Availability	• Europe	
Additive	• Antiblock	• Slip
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 2.2
Forms	• Pellets	

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.923	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.5	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Coefficient of Friction	0.16 to 0.20		ASTM D1894
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	50	µm	
Secant Modulus			ASTM D882
2% Secant, MD: 50 µm	190	MPa	
2% Secant, TD: 50 µm	175	MPa	
Tensile Strength			ASTM D882
MD: Yield, 50 µm	9.00	MPa	
TD: Yield, 50 µm	9.00	MPa	
MD: Break, 50 µm	17.0	MPa	
TD: Break, 50 µm	15.0	MPa	
Tensile Elongation			ASTM D882
MD: Break, 50 µm	450	%	
TD: Break, 50 µm	650	%	
Dart Drop Impact (50 µm)	120	g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD: 50 µm	500	g	
TD: 50 µm	400	g	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature	93.0	°C	ISO 306/A
Optical	**Nominal Value**	**Unit**	**Test Method**
Gloss (20°, 50.0 µm)	70		ASTM D2457
Haze (50.0 µm)	7.0	%	ASTM D1003

Extrusion	Nominal Value	Unit
Melt Temperature	150 to 170	°C
Extrusion Notes		
Blow-Up ratio 1:2.5		

Revision History
Document Created: Monday, February 13, 2012
Added to Prospector: May, 2005
Last Updated: 8/18/2011

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Notes

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

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